A Complete Bibliography of Publications in ACM SIGPLAN Notices, 2010–2019

Nelson H. F. Beebe
University of Utah
Department of Mathematics, 110 LCB
155 S 1400 E RM 233
Salt Lake City, UT 84112-0090
USA

Tel: +1 801 581 5254
FAX: +1 801 581 4148

E-mail: beebe@math.utah.edu, beebe@acm.org, beebe@computer.org (Internet)
WWW URL: http://www.math.utah.edu/~beebe/

27 October 2016
Version 2.18

Title word cross-reference

+ [529]. 2 [2308, 754]. 3 [1691, 2068]. < [2319]. = [529]. > [2319]. omega [2224, 2226]. F [2105]. k [1064, 189, 2392, 2094]. kb [520]. λ [1612]. M^3 [1805]. N [1941].

***** [518, 1784]. ***how** [1734].

-anonymity [520]. **-calculi** [1612]. **-Calling** [1064]. **-CFA** [189]. **-D** [1691]. **-dimensional** [754]. **-ing** [2105]. **-LSM** [2094]. **-native** [2308]. **-safety** [2392]. **-version** [1941].

11 [768, 1926, 1268, 2150]. **'16** [2339]. **1ML** [2105].

2 [1854, 1218, 1242]. **2002** [1230, 1229, 1228]. **2003** [1231]. **2010** [171, 394]. **2011** [727]. **2013** [1210]. **21st** [1675, 1210]. **256** [1995]. **2ndStrike** [447, 824].

360 [375].

64-bit [2194, 231].

A-DRM [2047]. **AASH** [214]. **abandon** [274]. **abduction** [752]. **abductive** [870, 1428]. **ABFT** [1331]. **ABI** [424]. **abolishing** [121]. **abort** [1689]. **abortive** [1730]. **aborts** [2121]. **absence** [2154]. **Abstract** [1528, 1926, 410, 1113, 1490, 1886, 1521, 55, 1797, 1857, 1976, 1751, 1995, 1010, 747, 1027, 1479, 2169, 2236, 1483, 1504, 2261, 1132, 1516,

1401, 1889, 1663, 1233, 1580, 476, 1287, 240]. **Abstracting** [2255, 1889, 240]. **Abstraction** [1109, 1873, 2373, 2259, 1879, 28, 1121, 2147, 1111, 1437, 1511, 756, 299, 383, 1631, 1440, 501, 532, 1102, 1748, 1151, 1019, 688, 1484, 1161, 370, 226, 1789, 374, 2072, 1622]. **Abstraction-guided** [28]. **Abstractions** [1577, 757, 150, 320, 498, 300, 359, 19, 1548, 390, 18, 1655, 2185, 1284, 305]. **abuse** [1370]. **AC** [691]. **accelerate** [2220, 129, 954]. **accelerated** [2086]. **Accelerating** [584, 1792, 398, 85]. **Acceleration** [2369, 431, 808, 1521, 901, 1232]. **Accelerator** [1943, 2084]. **Accelerators** [2368, 42, 1693]. **Accentuating** [641]. **acceptability** [869]. **Accepting** [2407]. **Access** [1969, 1877, 736, 2296, 2155, 1661, 1587, 1537, 1578, 1748, 51, 1420, 557, 694, 1709, 1538]. **accesses** [953, 1993, 1796, 1188, 1321]. **accord** [309]. **account** [2137]. **Accounting** [2055, 1313]. **accuracy** [893, 847, 1440, 1769, 179, 1981, 763]. **accuracy-aware** [1769, 763]. **Accurate** [1618, 2162]. **accurately** [183]. **ACDC** [1460, 1894]. **ACDC-JS** [1894]. **achieve** [274, 1314]. **achievement** [726, 727]. **Achieving** [585]. **ACM** [727, 1220]. **acquire** [2271]. **across** [201, 1424, 990, 1447, 327, 1770, 543, 1724, 1985, 1645]. **action** [101, 40, 1374]. **actions** [101]. **active** [446, 823, 1346, 594]. **Activities** [1224, 1568]. **actors** [1434, 969, 1058]. **actually** [119]. **ad** [615, 2183]. **adaptation** [1169, 295, 294, 52]. **Adapting** [958, 84, 956, 2170]. **Adaptive** [463, 1025, 2052, 1455, 2343, 2120, 1784, 1152, 855, 1616, 126, 2384, 154, 1261, 2081, 1237, 133, 53, 108, 1794]. **Adapton** [1613]. **Adding** [1468, 917, 418, 781]. **addition** [381]. **Address** [2345, 1076, 1354, 89]. **Addressing** [2316, 999, 74]. **adequacy** [2278]. **adjunction** [2227]. **adjusting** [204, 611, 1740, 683]. **ADLs** [2310]. **administrative** [327]. **Adoption** [1317, 1403]. **ADTs** [17]. **Advanced** [1107, 52, 143]. **advantage** [1193]. **adventure** [631]. **Adversarial** [184]. **advice** [47]. **Æminium** [1599]. **affects** [2176]. **affine** [2062, 2263, 2248, 2026, 2111, 620, 392]. **affordable** [1756]. **after** [1500, 2115]. **again** [1544, 2021]. **Against** [2372, 2293, 920, 921]. **AGDA** [980, 613, 612]. **AGDA-curious** [980]. **age** [537, 521]. **ages** [1241]. **agile** [330]. **Agility** [280, 1928]. **Ahead** [2347]. **Aid** [2049]. **aided** [1542, 118, 1637, 1649, 1320]. **air** [2269]. **Alembic** [1801]. **Algebra** [1859, 1591, 156, 1370, 955]. **Algebraic** [1840, 755, 1862, 1373, 2277, 1395, 1092, 404, 1171, 18]. **algebraically** [1109]. **Algebras** [2111, 1835, 1904, 2317, 1773, 2145]. **Algorithm** [593, 944, 468, 2070, 1331, 2256, 1340, 1772, 1013, 1718, 1321, 1316, 490, 2117]. **Algorithm-based** [593, 944]. **Algorithmic** [2248, 1984, 860, 405, 2017, 1696]. **Algorithms** [1840, 2277, 59, 1859, 143, 396, 258, 940, 1105, 1352, 2253, 1346, 2057, 2098, 559, 584, 1238, 35, 136, 1037, 1717, 968, 561, 1329, 454, 831, 483, 1319, 645, 927, 2076, 738, 1800, 1337, 1290]. **Alias** [1973, 350, 1187, 1290, 1798]. **aliased** [1257]. **aliasing** [2188]. **alignment** [253]. **alive** [1259, 1983]. **all-optical** [65]. **All-window** [567]. **Allocation** [1806, 2321, 706, 2163, 1659, 1230, 466, 2199, 841, 1076, 216, 996, 842]. **allocation-site-based** [2199]. **allocations** [1710]. **allocator** [1076]. **allocators** [2065]. **Almost** [1270, 1965, 2299, 1485, 1791]. **Almost-correct** [1270]. **almost-synchronous** [1791]. **ALTER** [523]. **alternation** [5]. **alternative** [1470]. **always** [2264]. **amateur** [1185]. **ambiguity** [328]. **among** [1156, 575]. **amorphous** [115]. **amortised** [996]. **amortized** [385].

amplification [887]. **analog** [2400]. **Analyses** [1852, 873, 164, 1406, 1796, 874, 44, 1622]. **Analysing** [2114, 2302, 2233]. **Analysis** [1977, 743, 1875, 1972, 96, 1957, 1970, 1839, 1976, 467, 479, 319, 112, 1753, 1624, 1582, 1066, 893, 1445, 109, 1610, 531, 1799, 979, 150, 2248, 6, 1523, 1725, 449, 826, 864, 363, 1437, 2382, 1485, 365, 477, 2169, 2097, 1996, 2168, 646, 597, 997, 2415, 2302, 847, 99, 2174, 472, 2274, 1785, 5, 84, 350, 788, 7, 385, 241, 886, 1755, 1249, 917, 1747, 1534, 1289, 1537, 894, 357, 642, 1461, 1403, 2287, 1717, 698, 2166, 1554, 301, 933, 189, 1618, 1240, 1053, 1085, 2258, 1644, 2170, 326, 1784, 100, 398, 1857, 369, 345, 1807, 2272]. **analysis** [163, 323, 132, 1589, 839, 1291, 1266, 103, 364, 1506, 678, 1489, 1044, 924, 996, 412, 2010, 1417, 1645, 699, 2380, 420, 1418, 2172, 961, 606, 2011, 872, 1321, 922, 1318, 1290, 1284, 1798, 1623, 895]. **analytics** [2074]. **analyze** [1697]. **Analyzer** [1851]. **Analyzing** [1852, 2369, 1462, 141, 76, 1094, 1283, 1754]. **Android** [1624, 1439, 2154, 2156, 1438, 2157, 2049, 1629, 2258, 1028]. **angelic** [29]. **annotations** [1549, 57, 1454, 1550]. **Annual** [1569, 1225]. **anonymity** [520]. **anonymized** [520]. **ANTLR** [518]. **Anton** [1218]. **Antony** [726]. **ANVIL** [2372]. **any** [1893]. **AOP** [687]. **apart** [918]. **APGAS** [1680]. **API** [354, 1194, 2295, 470, 2177, 294, 801, 511, 1448]. **APIs** [2283, 2300, 352, 1248]. **app** [1799]. **Application** [157, 2049, 2310, 794, 953, 1234, 2103, 1027, 2187, 843, 1189, 1312, 1618, 148, 789, 2386, 1031, 1724, 909, 687]. **application-database** [1724]. **application-level** [1189]. **Application-specific** [2310, 1234]. **Applications** [1977, 1880, 2351, 2352, 1965, 2053, 2054, 1970, 421, 145, 2303, 951, 1168, 1592, 2156, 1423, 1464, 1251, 1824, 770, 1247, 920, 1712, 2138, 845, 1656, 1195, 886, 86, 1630, 923, 277, 2165, 2141, 903, 1825, 107, 2166, 1629, 148, 1344, 1539, 921, 1394, 876, 2100, 134, 769, 2124, 2314, 1985, 924, 2395, 699, 592, 141, 954, 738, 792, 465, 104, 85, 1356, 685, 1683, 2430, 144, 1290, 540, 1669, 1634]. **Applicative** [2107, 1738]. **Apply** [2160]. **Applying** [156, 1530, 1393]. **Approach** [2342, 1936, 1378, 1465, 765, 233, 1496, 2262, 1363, 58, 562, 2189, 1204, 2028, 1574, 2138, 2098, 2311, 1034, 1202, 930, 1311, 278, 2383, 2387, 294, 2378, 2210, 1453, 97, 1484, 422, 469, 61, 438, 815, 1908, 1599, 2273, 78, 196]. **approaches** [2184]. **approachtheory** [477]. **ApproxHadoop** [1944]. **Approximate** [2178, 1837, 2349, 2364, 1945, 2363, 2164, 869, 1438, 2236, 1769, 1589, 496, 763]. **approximated** [698]. **approximation** [180, 456, 833, 16, 2399, 96]. **Approximations** [1944]. **apps** [1624, 1439, 2154, 1438]. **AppSec** [2054]. **Arbiter** [2304]. **Arbitrary** [1956, 1779]. **Architectural** [1966, 1926, 1952, 1917, 1168, 88]. **Architecture** [2320, 1967, 1931, 2333, 1927, 2343, 2047, 1173, 2268, 67, 1675, 841, 96, 326, 2386, 1167, 1980, 1492]. **Architecture-Adaptive** [2343]. **Architecture-aware** [2047]. **Architecture(R)** [1209]. **architectures** [281, 126, 456, 833, 470, 854, 160, 480, 1593, 1343, 1697, 288, 1295, 1208, 1637, 1812, 231]. **architecturing** [278]. **Archival** [2365]. **Arco** [2400]. **area** [748]. **arguments** [613]. **arithmetic** [2379]. **ARMv8** [2268]. **Array** [1318, 2262, 939, 365, 1334, 1205, 1089, 972, 2182, 2380]. **array-** [2380]. **array-based** [972]. **arrays** [843, 2397, 260, 203]. **Art** [272, 236, 329]. **Artifact** [1227, 1573]. **ASAC** [1589]. **aspect** [788, 53, 421]. **aspect-oriented** [53, 421]. **AspectJ** [48]. **aspects** [797, 297, 420]. **ASPIRE** [1800]. **ASPLOS** [1210, 2339]. **Assembly** [2342, 2431, 367, 295, 1199, 199, 2068].

assertion [464]. **assertions** [656, 966, 291, 1609, 225]. **Assessing** [2427]. **assessment** [2173]. **assigning** [1270]. **assignment** [137, 2266, 2133, 118, 1245, 1237]. **assignments** [1252]. **Assistant** [1886, 1933, 2118, 1098]. **Assisted** [2055, 1457, 849, 1619]. **associative** [112, 1605]. **Assumptions** [1958]. **Assurance** [2331, 1011, 612]. **AST** [1545, 1915, 1154, 1792]. **astrophysics** [1819]. **Asymmetric** [1955, 1921, 91, 1658]. **asymmetry** [214]. **asymmetry-aware** [214]. **asymptotic** [2016]. **async** [467, 117, 2075]. **async-finish** [117]. **async/finish** [467]. **Asynchronized** [1962]. **Asynchronous** [656, 1288, 1996, 598, 1123, 156, 1280, 1791, 1, 691, 136, 2091, 2376, 1800, 535]. **Asynchronously** [2346]. **Athena** [171]. **Atlas** [1776]. **atmospheric** [1316]. **Atomic** [2350, 1187, 689, 314, 687, 120]. **Atomicity** [1600, 1601, 435, 812, 2060, 515, 315, 66, 587, 643, 142, 641]. **atomicity-violation** [515]. **atomics** [2270, 1813, 1410, 2269]. **Attacks** [2372, 1930, 2336, 1194, 920, 741]. **attribute** [1333, 413, 1773]. **attribution** [1169]. **auditing** [550]. **augmented** [1419]. **Authenticated** [1512]. **Auto** [583, 2434, 1261, 712, 1691]. **auto-tuner** [1261]. **Auto-tuning** [583, 712, 1691]. **auto-vectorization** [2434]. **AutoMan** [1051]. **Automata** [1872, 1857, 1522, 1, 2235, 1107, 380, 1345, 1793]. **Automated** [870, 2174, 1785, 892, 515, 679, 1199, 1252, 1934, 1562, 2308, 502, 2090, 1391, 1049, 2031, 1184, 172]. **Automatic** [1146, 949, 598, 2024, 2152, 1247, 653, 1714, 2060, 1342, 1911, 494, 974, 414, 1621, 2246, 19, 1948, 1364, 495, 2124, 1906, 411, 522, 1985, 1951, 596, 996, 314, 191, 880, 365, 597, 1421, 1196, 1801, 1274, 407, 640, 1133, 1022, 492, 1207, 2150, 1821, 899, 1589, 103, 800, 2380, 104, 971]. **automatic-signal** [1274]. **Automatically** [34, 1035, 1981, 2421, 797, 2404, 1763, 734]. **Automating** [382, 2148, 1030, 1832, 1642, 1108, 2183]. **automation** [615]. **AutoMO** [2150]. **automotive** [109]. **autonomous** [1980]. **AutoSynch** [1274]. **Autotuning** [2017, 127]. **auxiliary** [1147, 379]. **Available** [1918, 910]. **average** [1811]. **aversion** [1157]. **avoid** [2397, 177]. **avoidance** [945, 1090, 1176]. **avoiding** [926, 227]. **avoids** [2269]. **award** [726, 727]. **awards** [1223, 1567]. **Aware** [1969, 1977, 2056, 1935, 706, 2083, 1153, 1624, 1464, 1330, 466, 2193, 1681, 1179, 959, 154, 455, 832, 444, 821, 841, 480, 1205, 169, 686, 1059, 214, 2049, 950, 313, 1769, 586, 1706, 97, 89, 927, 855, 2315, 81, 2093, 842, 113, 2047, 2074, 549, 1584, 763, 1974]. **Awareness** [2368]. **axes** [2109]. **AxGames** [2364]. **axiomatic** [1487, 192]. **axiomatization** [299, 387]. **axioms** [45].

B [1129]. **Babel** [333]. **Back** [310, 45, 2236, 453, 830, 716, 1120, 1081]. **back-translation** [2236]. **backed** [1251, 2430]. **backend** [1668, 344]. **Backpack** [1481]. **Backstage** [693]. **backward** [2174, 2109]. **backwards** [1467]. **Bad** [1938, 1194]. **baggage** [1032]. **Balanced** [610]. **balances** [2181]. **balancing** [130, 2089, 578]. **Ball** [1424]. **Bamboo** [196]. **band** [926]. **bank** [98, 96, 1188]. **Bar** [1114]. **Bare** [1928]. **Bare-metal** [1928]. **Barrier** [2067, 1437, 2224, 2071, 2198, 1647, 1337]. **Barriers** [1078, 677, 1353, 230, 1670, 1699, 967, 1020, 1079]. **base** [1393]. **Based** [2372, 2365, 2326, 1839, 2321, 1976, 2307, 143, 2303, 223, 1168, 1051, 317, 1496, 109, 1339, 425, 36, 2308, 979, 2367, 1331, 1661, 1725, 1303, 1806, 2199, 1635, 2097, 1632, 593, 320, 944, 663, 397, 110, 1925, 2316, 1307, 1785, 1068, 460, 837, 707, 886, 1760, 1671, 1274, 1025, 1301, 1664, 1203, 2084, 65, 2305, 1555, 840, 804,

849, 764, 972, 1978, 2153, 2424, 1585, 1551, 301, 933, 2383, 1072, 1936, 901, 416, 1013, 294, 2378, 789, 2291, 2136, 916, 351, 2096, 403, 786, 1142, 411, 578, 794, 596, 1553, 412, 1417, 801, 1164, 1579, 699, 524, 1599, 1015]. **based** [954, 638, 475, 1159, 1145, 1362, 961, 229, 1761, 465, 1800, 474, 1711, 569, 863, 908, 1165, 1267, 490, 935, 1299, 1593]. **basic** [1591]. **Basis** [1882]. **batched** [2086]. **batching** [1716]. **Battery** [1526, 1440]. **battlefield** [50]. **Bayesian** [1135, 2170]. **Baymax** [2368]. **BDDT** [961]. **be** [396, 940, 274]. **bedrock** [1397]. **before** [986, 697, 2085]. **beginning** [256]. **begone** [1049]. **Behavior** [2369, 2196, 1903, 79, 163, 2310, 72, 1071, 1063]. **Behavioral** [1732, 1124, 1164]. **behaviors** [1771]. **behaviour** [520, 1083]. **behaviour-preserving** [520]. **Behaviours** [1958]. **benchmark** [2090, 678]. **benchmarking** [1460, 1894, 1459]. **benchmarks** [853, 679]. **benefit** [1429]. **Benefits** [677, 1026, 99, 106, 924]. **best** [432, 809]. **Better** [329, 342, 888, 2085]. **between** [367, 702, 2300, 782, 338]. **Betweenness** [1319]. **Beyond** [1926, 1690, 36, 209]. **BI** [464, 1119]. **Bias** [1489]. **Bias-variance** [1489]. **bidirectional** [1400, 2107, 634]. **bidirectionalization** [252]. **Bidirectionalizing** [254]. **Big** [1964, 1965, 1841, 1464, 797, 1348]. **big-step** [797]. **billions** [1545]. **binaries** [2406, 2247, 1039, 2018]. **Binary** [2049, 2051, 488, 140, 938, 1704, 1255, 1300, 1298, 220, 840, 1668, 1702, 916, 2096, 557, 1199, 1579, 133, 1667, 1299]. **binary-splitting** [133]. **Binders** [629, 1466, 760, 255]. **Binding** [2275, 1202, 134, 1726]. **binding-safe** [1726]. **bindings** [630]. **biological** [1140]. **biology** [1542, 1001]. **bird** [1804]. **Bisimulation** [399]. **bisimulations** [1139, 732, 2267]. **bit** [2194, 2393, 237, 231]. **bit-manipulations** [2393]. **bitcode** [1249]. **bitcoin** [2026]. **Black** [1836, 1034]. **black-box** [1034]. **Blame** [372, 2133, 2021, 373, 1399, 2266, 31, 2407]. **Blink** [443, 820]. **bloat** [1445, 1464, 177]. **bloat-aware** [1464]. **Block** [919, 468, 1244, 1595, 411, 961]. **block-level** [1244, 1595, 961]. **block-mapping** [468]. **blocking** [1703, 937]. **blocks** [120]. **BLog** [1244]. **Blue** [1347]. **board** [1645]. **boat** [956]. **boilerplate** [1088, 2145]. **Bolt** [1039]. **boolean** [1495, 14, 1119]. **Boosting** [1234, 1885, 1715, 916]. **Bootstrapping** [779, 773]. **borrowing** [772]. **Both** [1955, 106]. **Bottle** [1423]. **bottlenecks** [1423]. **bottom** [1623]. **bottom-up** [1623]. **bound** [112, 188]. **boundaries** [1724]. **boundary** [2300]. **Bounded** [1450, 780, 1965, 1788, 1957, 2106, 389, 1607, 731, 1986]. **Bounded-latency** [780]. **Bounding** [1921, 1677]. **bounds** [395, 1625, 2025, 1279]. **Box** [1836, 1066, 1034, 275]. **Brain** [2340]. **Brainy** [489]. **Branch** [1951, 1298]. **Breadcrumbs** [164]. **breadth** [950]. **breadth-first** [950]. **breakable** [523]. **Breaking** [2224, 2375, 2043, 1647]. **breakpoints** [976]. **Bridging** [1495, 2207, 42]. **bright** [613]. **bring** [553]. **Bringing** [716, 1944, 173, 321]. **browser** [1341, 1893, 1074, 1647, 713, 1541]. **Budget** [2321]. **Buffer** [1977, 1246, 99, 1188, 513]. **Buffer-Throughput** [1977]. **buffered** [1129]. **Buffers** [1942]. **bug** [164, 1447, 1068, 1040, 290, 649, 166, 901, 1709, 76, 1182]. **buggy** [286]. **Bugs** [1954, 2356, 2357, 77, 1265, 447, 824, 861, 729, 2159, 2016, 883, 285, 506, 78, 448, 825, 1360]. **Build** [2329, 2143, 1785]. **Building** [1722, 1826, 1915, 64, 986, 902]. **bulk** [1352]. **burning** [1477]. **bus** [466, 2192]. **Butterfly** [84].

C [1419, 2175, 1878, 45, 361, 768, 1121, 1241, 1363, 1625, 1926, 2431, 1419, 770, 882, 1640, 2013, 1029, 1851, 2012, 1487, 929, 38, 2388,

224, 1410, 874, 2150, 1641, 362, 769, 1462, 883, 2102, 881, 1070, 1546, 506, 1798]. **C&C** [2310]. **C-like** [929, 874]. **C-SHORe** [1363]. **C/C** [768, 1121, 1410, 2150, 881, 38]. **C11** [2270, 1268, 1452, 1848]. **C11/C** [1268]. **C4** [709]. **Cache** [706, 1582, 1105, 477, 169, 2327, 111, 2076, 1976, 233, 1457, 137, 568, 2381, 2405, 705, 1688, 2397, 1086, 849, 702, 970, 148, 586, 2377, 2200, 567, 1812, 135, 540, 1584, 1974]. **cache-conscious** [233]. **cache-efficiency** [2076]. **Cache-oblivious** [2076]. **cache-partitioned** [970]. **Cache-related** [1582]. **caches** [112, 1582, 233, 202, 478, 111]. **caching** [2083, 1084, 849, 921]. **CACM** [1225]. **Caisson** [491]. **CakeML** [1493]. **Calculating** [1399]. **calculi** [1612, 2227]. **Calculus** [1881, 1861, 984, 1479, 2111, 1114, 1727, 117, 857, 529, 1731, 2218, 250, 1172]. **Call** [1793, 1194, 2273, 838]. **Callbacks** [1839]. **Calling** [1064, 370, 526, 1406, 1793]. **camlp4** [623]. **can** [940, 649, 1127, 291, 2125, 2172, 1848]. **canary** [2399]. **cannot** [396]. **Canonicity** [754]. **Cap** [2358]. **Capability** [206, 1897]. **capable** [2041]. **capacity** [1451]. **capo** [678]. **captured** [1353]. **capturing** [1442]. **card** [865]. **Cardinalities** [2428]. **cardinality** [1506]. **cards** [919]. **care** [1190]. **carte** [1118]. **Cartesian** [2392]. **Case** [1977, 1880, 1900, 432, 809, 271, 440, 817, 1583, 778, 499, 57, 322, 883, 800, 2068, 1665, 2175]. **cases** [612]. **CASM** [1580]. **CASPAR** [2375]. **Casper** [2273]. **Cast** [1535]. **CASTLE** [2096]. **casts** [2012, 782]. **Catch** [649]. **category** [631]. **cats** [1602]. **Causality** [2355, 1477, 1997]. **causally** [2250]. **'Cause** [2251, 519]. **causes** [2069, 505]. **causing** [1679]. **CC** [591]. **CDSChecker** [1410]. **Cedalion** [682]. **CEGAR** [501]. **ceiling** [364]. **Celebrating** [2028]. **Cell** [143]. **Cell-based** [143]. **Cells** [2349]. **center** [1660, 82]. **centered** [978]. **centers** [83]. **centrality** [1319]. **centralization** [1907]. **centre** [1984]. **centric** [1824, 963, 1295, 283, 196]. **century** [1675, 1210]. **certification** [773]. **Certified** [2128, 1879, 2025, 2250, 261, 773, 2285]. **CETS** [224]. **CFA** [189]. **CFL** [1290]. **CFL-reachability** [1290]. **CGRAs** [98]. **chains** [270]. **Chair** [1220, 1564, 1570, 1219, 1563]. **Challenges** [902, 2361, 114, 853, 904, 708, 326, 124]. **Change** [1919, 428, 805, 1157, 681, 1314, 2127]. **changes** [1612]. **channel** [1240]. **channels** [999, 863]. **Chapar** [2250]. **Chaperones** [1069]. **Characteristic** [636, 265]. **characteristics** [1661, 1052]. **Characterizing** [1877, 79]. **Charles** [726]. **cheap** [94]. **check** [619]. **CheckCell** [1780]. **checker** [191]. **Checking** [1139, 2325, 1883, 2329, 1752, 2357, 1046, 695, 1601, 2230, 516, 435, 812, 1590, 1485, 2139, 2187, 1228, 2276, 1065, 1997, 2141, 200, 501, 1555, 660, 38, 2383, 426, 1819, 1013, 1410, 1484, 2419, 1897, 275, 165, 1425, 749, 192, 225, 852]. **checkpoint** [247]. **checkpointed** [545]. **checkpointing** [1234, 544, 1017]. **checkpoints** [1212]. **Checks** [2181, 700]. **chemical** [2189]. **children** [375]. **Chimera** [894, 1959]. **Chip** [2320, 92, 1993, 65, 2007, 105]. **Chisel** [1769]. **Chlorophyll** [1637]. **choice** [2017]. **choices** [2251]. **Choreographies** [1849]. **choreography** [742]. **CIL** [317]. **circuit** [455, 832, 804]. **circuits** [2007]. **circular** [1384, 303]. **citizens** [2420]. **CLAP** [1264]. **clarified** [2179]. **Clarifying** [768]. **clarity** [1037]. **Class** [1432, 1606, 1091, 2121, 51, 270, 2420, 2105, 2299, 2214, 355, 681, 1060, 606, 321, 1982]. **classes** [613, 296, 2214, 303, 355, 1060, 1258]. **classic** [1717]. **classical** [407, 239]. **Classification** [2327, 1661]. **classification-based** [1661]. **Classifying** [51]. **clauses** [519]. **Clean** [338]. **cleanliness** [1079]. **clever** [1583]. **client**

[1824, 2294]. **client-centric** [1824]. **client-side** [2294]. **clients** [1152]. **clocked** [472]. **clones** [419]. **CLOP** [2309]. **Closed** [1532]. **closer** [279]. **closures** [2235]. **Cloud** [2353, 2046, 2354, 1562, 542, 725, 1002, 959, 428, 558, 805, 1211, 902, 1315, 1250, 1418, 555, 548]. **cloudlets** [442, 819]. **CloudNet** [548]. **Clouds** [1928, 550, 549]. **CloudSeer** [2354]. **Clover** [1968]. **clue** [519]. **clues** [75]. **cluster** [1237, 1696]. **clustered** [2201, 841]. **clustering** [1585]. **clustering-based** [1585]. **Clusters** [2351, 2047, 2042, 960, 930, 443, 820]. **CMD** [1661]. **CMP** [135]. **CMPI** [959]. **Co** [2332, 2187, 1587, 289, 1232]. **co-contextual** [2187]. **Co-Design** [2332, 1587]. **co-designed** [1232]. **co-located** [289]. **coaching** [1024]. **coalesced** [1321]. **coalescing** [1581]. **Coalgebraic** [1858, 2276]. **coalgebras** [2111]. **Coarray** [1682]. **Coarse** [3, 480, 1147, 672]. **coarse-grain** [672]. **Coarse-grained** [3, 480, 1147]. **COATCheck** [2335]. **Code** [1878, 2329, 2343, 1639, 1841, 2377, 419, 1427, 1902, 1708, 2293, 512, 1163, 1168, 481, 37, 2308, 1829, 1632, 1545, 797, 2295, 2174, 286, 1640, 298, 1300, 1249, 1126, 407, 928, 1262, 297, 107, 2246, 1581, 2309, 2220, 2018, 1072, 1443, 2390, 1803, 403, 2063, 741, 2310, 422, 2102, 469, 794, 1985, 1579, 2186, 2037, 2119, 1407, 2030, 32, 421, 687, 1028, 490, 1588]. **code-injection** [741]. **codes** [259]. **Coding** [1869]. **Coeffects** [1731]. **coercion** [756, 2021]. **coercions** [1737]. **CoExist** [1157]. **CoGENT** [2331]. **Cognitive** [1946]. **coherence** [1504, 498]. **coherent** [1812]. **cohorting** [946]. **coinductive** [1503, 387, 1117]. **collaboration** [1052]. **Collaborative** [1959, 705, 1084, 181]. **collapsible** [1363]. **collected** [234, 261]. **Collecting** [227, 711]. **collection** [1815, 221, 1809, 1434, 2201, 2426, 1990, 707, 2427, 517, 1595, 780, 1077, 703, 2087, 2016, 176, 1454, 1814, 1759, 222, 232, 712, 229, 1810, 2273, 2132]. **collection-oriented** [2087]. **collections** [1412, 156, 2412, 1019, 2182]. **Collective** [968, 143, 963, 927, 2095]. **Collector** [1964, 223, 856, 1231, 2193, 1082, 710, 1455, 1454, 709, 618]. **collectors** [1192]. **Collie** [1082]. **color** [1367]. **coloring** [590, 2091, 138]. **Combinatorial** [1581]. **combinators** [621, 717, 262, 1787, 1413, 1000]. **combine** [1285]. **Combined** [1249]. **Combining** [1445, 1482, 2328, 2090, 2258, 252, 533, 1056, 1397, 947, 470, 406, 989, 922]. **COMMA** [1669]. **commensal** [1762]. **commercial** [1392]. **CommGuard** [1939]. **commit** [565]. **commitment** [2026, 697]. **Committee** [1568, 1224]. **Commodity** [2374, 2330, 1757, 431, 808, 913, 848, 2029, 919]. **Common** [1870, 1848, 1334]. **communicate** [1024]. **Communicating** [1849, 574]. **Communication** [2320, 926, 1949, 963, 1939, 143, 949, 2097, 910, 2098, 131, 494, 152, 927, 1691, 2134, 284, 569, 2132]. **Communication-centric** [963]. **communications** [470, 2095]. **communicators** [575, 968]. **Commutative** [482]. **Commutativity** [1628, 527, 528]. **comonads** [2212]. **Compact** [561, 530, 1455, 2132]. **compacting** [1082, 709]. **compaction** [395, 1279, 2195]. **comparative** [1896]. **Comparing** [801, 2184]. **Comparison** [1940, 2358, 1234, 559, 1429, 1555, 2148, 129, 1713, 1083]. **Compartmental** [713]. **COMPASS** [87]. **compatibility** [424]. **Compatible** [2051, 281]. **CompCert** [2418, 1853]. **Compensate** [2384]. **compilation** [512, 471, 488, 775, 198, 307, 1497, 2236, 1483, 1132, 455, 832, 1025, 1600, 1310, 2237, 686, 1301, 684, 1580, 2184, 796, 495, 855, 360, 1180, 2162]. **compile** [470, 1992, 423]. **compile-time** [470, 1992, 423]. **compiled** [340, 422]. **Compiler** [1949, 1620, 849, 1243, 1968, 118, 1268, 1965,

105, 1619, 1848, 1789, 1320, 317, 68, 1762, 2206, 1026, 1590, 1269, 9, 2103, 843, 776, 1025, 917, 407, 1392, 1023, 2159, 2290, 1987, 884, 1474, 2309, 499, 1585, 1994, 745, 10, 224, 2116, 2378, 1637, 1011, 1297, 883, 2102, 1701, 2129, 1017, 33, 217, 210, 2402, 1012, 170, 155, 908, 1047, 895, 338]. **Compiler-assisted** [849, 1619]. **compiler-driven** [1017]. **compiler-runtime** [210]. **Compilers** [2342, 854, 1142, 1603, 173, 506]. **Compiling** [1914, 2288, 854, 2386, 768, 563, 620, 2245, 402, 1786, 261]. **complementation** [1432]. **Complete** [1866, 1400, 1253, 190, 1145, 2062, 191, 1511, 2023, 2014, 1463, 1108]. **Completeness** [1871, 799, 1515]. **completing** [1432]. **completion** [2295, 1253, 878, 1639]. **complex** [470, 602, 688, 13]. **Complexity** [1877, 397, 1321, 2403, 2114, 995, 2242, 801]. **Component** [295, 2303, 788, 416, 2258, 789, 57, 783, 1164, 1165]. **component-based** [2303, 416, 789, 1164]. **component-oriented** [57]. **components** [2277, 417, 1805, 1718]. **Composable** [689, 1674, 138, 284, 535, 1730, 1002, 1613, 691, 2078, 567]. **compose** [1033]. **composed** [643]. **Composing** [1162, 195, 2310, 2004, 868]. **composite** [227]. **Composition** [420, 354, 785, 153, 788, 62, 303]. **Compositional** [1610, 2025, 1730, 5, 1872, 1853, 2417, 1125, 2108, 1388]. **Compositionality** [1871]. **compositionally** [2116]. **comprehensions** [716]. **Comprehensive** [2040, 599, 704, 1554]. **compression** [582, 547]. **compromises** [2032]. **CompSC** [912]. **Computation** [1963, 1949, 1924, 1861, 204, 2178, 1051, 759, 945, 665, 2234, 611, 1313, 1740, 174, 671, 659, 2396, 1218, 1613, 2180, 169, 2425, 998, 1822, 152, 942, 1596, 1731, 441, 818, 496, 1691, 266, 954, 2068, 374, 2075, 1028]. **computation-communication** [1691]. **Computational** [2359, 1186, 502, 1001, 387, 1769]. **computations** [481, 2435, 1896, 1710, 2063, 1418, 80, 594, 763]. **compute** [2385, 1583, 585, 291]. **Computer** [1375, 1932, 434, 811, 1210, 1675, 1185]. **Computers** [2368, 1933, 1927, 1180]. **Computing** [1946, 2364, 2340, 114, 58, 325, 1308, 1260, 444, 821, 978, 1347, 570, 278, 1127, 956, 1530, 323, 1696, 1589, 1701, 124, 2093, 108, 457, 834, 2398]. **con** [678]. **ConAir** [1182]. **concatenation** [55]. **concatMap** [1000]. **concealing** [1910]. **concepts** [45]. **conceptual** [326]. **concern** [1445]. **concerns** [307]. **concise** [661, 1748]. **concolic** [943, 1277]. **Concurrency** [1958, 1962, 2356, 2036, 322, 1677, 1709, 361, 768, 1121, 116, 1447, 591, 2415, 1265, 2268, 447, 824, 394, 1338, 1040, 1264, 378, 290, 1034, 722, 1147, 415, 514, 239, 1636, 901, 1206, 2269, 360, 285, 1015, 2085, 868, 1130, 1396, 2185, 1452, 2215, 76, 2092, 78, 448, 825, 1182, 2004]. **concurrency-bug** [1447]. **Concurrent** [1883, 1809, 316, 1962, 1275, 1865, 890, 1872, 1882, 341, 2195, 976, 937, 1723, 222, 2059, 396, 1478, 101, 140, 153, 156, 2070, 2277, 1434, 1125, 1704, 1700, 751, 595, 2057, 230, 1128, 1615, 1057, 1997, 1080, 1595, 1707, 722, 764, 2252, 575, 193, 1748, 38, 1325, 1018, 1702, 454, 831, 1410, 688, 1036, 2096, 1988, 508, 643, 999, 1599, 709, 376, 1320, 513]. **concurrent-by-default** [1599]. **CONCURRIT** [1265]. **condensation** [1254]. **Conditional** [1951, 686]. **Conditionally** [2146]. **conditions** [527, 698]. **conferences** [1227]. **confidence** [1270]. **Configurable** [2366, 90, 1359, 1075]. **Configuration** [2400, 1307, 2301, 438, 815, 2416]. **configuration-related** [2301]. **Confined** [1766]. **conflict** [2151, 1113, 2397]. **conflicts** [2033, 1156, 1188]. **Confluences** [2223]. **confusion** [1468]. **Congruence** [1860, 1139]. **conjoint** [1560]. **Conjugate** [1874]. **ConMem** [78]. **connected** [1718]. **connecting** [75]. **connection** [1479, 609].

Connections [2344]. **conquer** [1371, 203]. **conscious** [180, 233]. **consciousness** [666]. **ConSeq** [448, 825]. **Conservation** [80, 1518]. **conservative** [1759, 1634]. **considered** [1188]. **Consistency** [2325, 1523, 1502, 1776, 434, 811, 2251, 2271, 1453, 1217, 89, 587, 1800, 852]. **consistent** [1231, 2250, 2020]. **Consolidated** [2351, 1658, 1315]. **Consolidation** [2048, 1651, 904]. **Constant** [1840, 2277]. **Constrained** [1061, 416, 1387]. **constrained-monad** [1387]. **constraint** [1106, 1496, 979, 2181, 2312, 2204, 1901, 1085, 1295, 1807]. **constraint-based** [1496, 979]. **constraint-centric** [1295]. **Constraints** [739, 1936, 664, 2142, 1652, 592]. **Constructing** [1919]. **construction** [1556, 769, 679]. **constructions** [486]. **constructive** [1634]. **constructors** [1547]. **constructs** [591, 1771]. **consumer** [951, 1989]. **consumption** [2382, 2377]. **contained** [381]. **container** [581]. **containers** [371, 1178, 335, 177]. **containment** [387, 1621]. **contemporary** [135]. **content** [365]. **contention** [2079, 2405, 73, 702, 122, 1706, 1351, 141, 2069, 540, 74]. **contents** [623]. **Context** [1878, 1969, 1876, 1839, 1624, 1064, 1371, 164, 280, 1406, 2317, 1440, 1289, 1461, 1644, 1731, 370, 2095, 1645, 182]. **Context-Aware** [1969]. **context-dependent** [1731]. **Context-Free** [1876, 1371, 182]. **Context-Sensitive** [1839, 1461]. **context-sensitivity** [1289, 1644, 1645]. **contexts** [1779, 526, 358]. **contextual** [307, 2187]. **contiguous** [1710]. **continuations** [1395, 1730, 2121, 607, 309]. **continuator** [298]. **Continuity** [6]. **Continuous** [2333, 151, 1440, 1136, 1259]. **continuous-time** [1136]. **Continuously** [1768, 709]. **Contract** [2305, 1733, 2134]. **Contract-based** [2305]. **Contractions** [1864]. **Contracts** [102, 1229, 30, 1846, 1847, 355, 1890, 2128, 987, 1027, 373, 1430, 616, 1732, 736, 571, 2133, 414, 1045]. **Control** [1967, 1972, 2287, 2363, 1456, 473, 2147, 36, 2126, 2384, 1730, 249, 751, 2167, 2274, 298, 1631, 1249, 1889, 1233, 739, 2290, 239, 1653, 753, 1420, 605, 723, 1071, 2296, 676, 606, 863, 2004]. **Control-Flow** [1972, 2287, 2147, 2274, 1249, 1653]. **controllable** [907]. **controlled** [180, 1550]. **controller** [1626, 102]. **Controllers** [2337, 1294, 2222]. **Controlling** [354, 2191, 669, 1442]. **convergence** [1694]. **convexity** [401]. **convolution** [720]. **CoolAir** [1935]. **Cooled** [1935]. **cooling** [83]. **cooperating** [1199]. **cooperation** [575]. **Cooperative** [1176, 573, 92, 290, 1205]. **coordinated** [1203]. **Coordinating** [2352, 1669]. **copattern** [2124]. **copatterns** [1378, 1104]. **Copperhead** [563]. **coprogramming** [1379]. **Copy** [2336, 1991]. **copying** [565]. **Coq** [1498, 336, 773, 1098, 1369, 2117, 2285]. **Core** [2374, 1592, 1241, 92, 1434, 1308, 90, 1087, 2205, 1332, 154, 459, 836, 1202, 840, 117, 1987, 1719, 1717, 288, 708, 1188, 2105, 478, 108, 971, 196, 1075]. **corecursion** [2118, 994]. **CoreDet** [68]. **COREMU** [579]. **cores** [93, 1707, 147, 712, 80]. **cornerstone** [238]. **corpus** [1755]. **Correct** [373, 1850, 1322, 2264, 1270, 1340, 631, 546, 2246, 1983, 2146, 641]. **Correction** [2328]. **Correctness** [1376, 516, 975, 1752, 14, 165]. **corrector** [619]. **correlation** [1797]. **correlations** [1063]. **correlator** [132]. **corruption** [1712]. **Cost** [2337, 1737, 468, 2113, 1984, 1233]. **costs** [710]. **Count** [2357, 1491, 1081]. **Counter** [1525, 1652, 539]. **Counter-factual** [1525]. **Counterexample** [22, 1821]. **Counterexample-guided** [22]. **counterexamples** [2260, 2038, 2033, 2023, 11]. **counters** [1181, 1355, 1086]. **counting** [1081, 1408]. **counts** [237, 1326]. **Coverage**

[2394, 651, 1042]. **Coverage-directed** [2394]. **coverage-driven** [1042]. **covering** [1441]. **covert** [999]. **CPHASH** [970]. **CPS** [637]. **CPU** [494, 960, 147, 2081, 1316]. **CPU-GPU** [1316]. **CPU/GPU** [960]. **Crash** [2325, 208, 2231]. **Crash-Consistency** [2325]. **Crazy** [2339]. **Creating** [853, 936, 53]. **Critical** [1954, 2322, 1768, 356, 445, 822, 186, 1634]. **criticality** [1673]. **Cross** [1972, 2165, 1861, 2044, 289, 1442, 2308, 2389, 2289, 1789, 1666]. **Cross-ISA** [2044, 1666]. **Cross-Kernel** [1972]. **Cross-language** [289, 2289, 1789]. **Cross-layer** [2165]. **Cross-Level** [1861]. **cross-modification** [2389]. **cross-platform** [2308]. **cross-thread** [1442]. **Crosscut** [207]. **crosscutting** [307]. **crossing** [1155]. **Crowd** [1885]. **Crowd-Sourcing** [1885]. **Crowdsourcing** [2364]. **CRPD** [112]. **Cruiser** [513]. **cryptographic** [1995, 1494, 1469]. **Cryptol** [804]. **CSR** [2374]. **CSS** [2138]. **CSX** [582]. **CUDA** [584, 162, 1683]. **CUDA-NP** [1683]. **CUDAlign** [129]. **culture** [1185]. **curious** [980]. **Curry** [239]. **custom** [1230]. **Customizable** [2190, 424, 905]. **customization** [797]. **customizations** [297]. **customized** [1406]. **cut** [1383]. **Cyber** [1917, 324]. **Cyber-Physical** [1917, 324]. **Cybertron** [1802]. **cycles** [1477]. **cyclic** [1216]. **Cyrus** [1189].

D [1691, 1909, 2068, 1974]. **D-cache** [1974]. **DaCapo** [1034]. **DAG** [2008]. **dark** [1241]. **DARPA** [1721]. **Dart** [2286]. **Data** [1969, 1323, 2367, 2193, 1930, 1962, 1886, 1877, 1964, 485, 160, 1473, 1343, 2327, 1965, 2391, 1425, 1839, 1843, 1711, 644, 2330, 204, 1716, 83, 2163, 1602, 1066, 1780, 2002, 233, 1757, 1003, 185, 531, 1464, 520, 161, 1501, 563, 760, 153, 194, 1586, 1740, 1437, 2024, 2152, 1041, 1255, 2261, 751, 1112, 2003, 843, 1712, 1257, 1587, 890, 1128, 1144, 131, 1760, 1660, 464, 480, 978, 35, 1787, 489, 202, 913, 98, 527, 2425, 936, 1578, 1559, 2241, 1650, 1811, 445, 822, 406, 737, 2078, 1748, 313, 2080, 115, 1512, 1775, 561, 1410, 404, 1354, 1641, 82, 2420, 1152]. **data** [1272, 655, 2279, 1142, 496, 844, 111, 2249, 2020, 1908, 2433, 1605, 81, 1598, 18, 168, 1705, 1431, 1055, 142, 1774, 2183, 701, 2030, 842, 1789, 1175, 594, 87, 1356, 1321, 1320, 1802, 178, 1073, 2422, 155, 1273, 513, 212, 572, 196]. **data-centered** [978]. **data-centric** [196]. **Data-Dependence** [1839]. **data-dependent** [1437, 35]. **Data-driven** [2391, 1425, 644, 594]. **data-flow** [843, 844]. **data-mining** [1602]. **Data-only** [1323]. **Data-Parallel** [1843, 2367, 194, 1586, 115, 701, 1802]. **data-parallelism** [1003]. **data-race** [1041, 313]. **data-race-free** [2080]. **data-structures** [2024, 737]. **data-triggered** [1055]. **data-types** [760]. **database** [542, 1251, 21, 627, 1724, 1071, 792, 2430]. **database-backed** [1251, 2430]. **Databases** [1870]. **Datacenter** [2356, 906]. **datacenter-scale** [906]. **Datacenters** [1935, 1179, 1177]. **dataflow** [1592, 1246, 664, 2381, 2312, 1247, 84, 1901, 345, 652, 1318, 1284]. **datalog** [13, 2401, 1622]. **datarace** [900]. **datasets** [201]. **datatype** [2226, 974]. **datatype-generic** [2226]. **Datatypes** [1847, 621, 2131, 2238]. **Day** [1869]. **DBILL** [1668]. **DBT** [219, 1301]. **DDG** [916]. **DDG-based** [916]. **DDGacc** [916]. **DDOS** [1214]. **DDS** [1562, 789]. **de-duplication** [1303]. **dead** [1414, 2257]. **deadline** [1246]. **Deadlock** [1123, 945, 2071, 1778, 1678]. **Deadlock-freedom-by-design** [1123]. **deadlocks** [1357]. **DeAliaser** [1187]. **deallocation** [1015]. **Debugger** [2360]. **debuggers** [798, 1458]. **Debugging** [1945, 120, 1780, 1756, 520, 1525, 966, 1984, 1068, 1674, 2036, 1618, 1240, 476, 206, 1783,

1763, 1183, 474]. **decade** [114, 2101]. **Decentralizing** [1884]. **Decidability** [2240]. **Decidable** [406]. **Deciding** [742]. **Decision** [1858, 18, 1523, 388, 2260, 2008, 989, 1362]. **decision-making** [1523]. **Declarative** [1842, 2158, 1545, 2020, 34, 331, 302, 1156, 2401, 492, 438, 815, 1558]. **Declaratively** [680, 798]. **declassifiers** [1133]. **decompilation** [2238]. **Decomposition** [1344, 1692]. **decompression** [1238]. **Deconstraining** [1008]. **deconstructing** [1646]. **Decoupled** [2089, 165]. **Decoupling** [73]. **decreasing** [1454]. **Deductive** [1886, 1159]. **deduplication** [1661, 1671]. **Deep** [1879, 1749, 1656, 1910, 2159, 602, 2402]. **default** [400, 1599]. **deferred** [1012]. **Defined** [1952, 1626, 2415, 1651]. **Defining** [2013, 741, 798]. **definition** [533, 1163, 331, 648, 285]. **definition-** [533]. **definition-use** [285]. **DeFuse** [285]. **degrading** [2155]. **degree** [484]. **Déjà** [2215]. **Delay** [389, 1582]. **Delay-bounded** [389]. **Delegated** [690]. **delegation** [1416]. **deletions** [1808]. **delimited** [1730, 607]. **Delivery** [2040]. **DelphJ** [1416]. **delta** [410, 1158, 547]. **delta-oriented** [1158]. **Demand** [1203, 1927, 299, 2167, 1613, 1039, 1028]. **Demand-based** [1203]. **demand-driven** [299, 2167, 1613]. **Demo** [1825, 1826]. **demonstration** [1829, 1823, 2310]. **Denotational** [2113, 1137]. **DeNovoND** [1174]. **DeNovoSync** [1956]. **Dense** [1919, 156, 944, 955]. **Density** [2349, 771, 619]. **Deoptimization** [1664]. **Dependence** [1950, 1839, 474, 1254, 2009, 654, 961, 2011]. **Dependence-based** [474]. **dependences** [1442, 523]. **dependencies** [2143, 1984, 1216, 786]. **Dependent** [1048, 24, 1834, 1856, 2243, 11, 1765, 1519, 267, 1373, 1437, 1131, 35, 755, 2239, 1361, 1731, 624, 980]. **Dependently** [1097, 1482, 1472, 251]. **Depending** [1741]. **deployed** [1240]. **deployment** [846, 877]. **depth** [1439]. **depth-first** [1439]. **depths** [2388]. **deques** [1336]. **dequeuers** [580]. **dereference** [698]. **derivation** [804, 336, 103]. **derivatives** [2403, 617, 1362]. **derived** [1160, 212]. **Deriving** [619, 1984, 337]. **description** [491, 97]. **descriptions** [34, 334]. **deserve** [356]. **Design** [2332, 1837, 2344, 874, 1979, 104, 1892, 1953, 1464, 1123, 1586, 472, 2208, 1587, 2311, 375, 339, 42, 1344, 322, 1734, 1167, 2315, 678, 989, 2115, 2432, 352, 1321, 838, 850, 895]. **design-driven** [2311]. **design-space** [1344]. **designation** [47]. **designed** [1232]. **Designing** [1691, 946]. **designs** [801]. **Desktopping** [2052]. **desktops** [1658]. **destruction** [769]. **destructive** [184]. **desugaring** [2108]. **details** [99]. **detect** [1357]. **Detecting** [1712, 2138, 1156, 1067, 177, 1448, 2097, 184, 963, 861, 285, 511, 78, 448, 825, 572]. **Detection** [2330, 2178, 1449, 1146, 1445, 2156, 164, 185, 1234, 1331, 1447, 1628, 1041, 2405, 1255, 286, 1630, 1631, 649, 642, 1317, 640, 1676, 1629, 2080, 901, 2016, 1354, 876, 899, 1217, 900, 1411, 1897, 1778, 1678, 758, 1619, 1175, 540]. **detectors** [166]. **Determinacy** [1753, 1266]. **Determination** [2364, 20]. **determinism** [1487, 70, 894, 1350, 1648, 1174]. **Deterministic** [858, 2356, 941, 68, 940, 400, 1173, 1335, 434, 811, 377, 2245, 1500, 1597, 1699, 721, 961]. **deterministic-by-default** [400]. **DEUCE** [1920]. **Developer** [2333, 1052, 955, 1446]. **developers** [1799, 1429]. **developing** [63, 58, 1909, 2175]. **development** [109, 276, 1498, 2311, 648, 1392, 1053, 1735, 789, 2315, 794, 1898, 782, 954, 421, 1165]. **Device** [1934, 473, 2417, 1212, 585, 439, 816, 438, 815, 2072]. **Devices** [1942, 2400, 1341, 912, 441, 818, 1199, 838].

DIABLO [1932]. **diagnosability** [429, 806]. **Diagnosing** [2069, 1982]. **diagnosis** [1181, 870, 476, 75, 1524, 1360]. **diagrams** [790]. **DIAM** [1593]. **DIAM-based** [1593]. **did** [333]. **Diderot** [864]. **difference** [693]. **differencing** [1797]. **different** [1345]. **Differential** [1837, 1838, 735, 2234, 2394, 1131, 2036, 250]. **Differentiated** [1927]. **differentiation** [1612]. **digital** [1051, 919]. **Dijkstra** [1286]. **dimensional** [754]. **Direct** [2040, 795, 233, 2411]. **Directed** [1968, 525, 1951, 880, 2394, 1200, 2139, 1700, 2282, 1243, 1443, 2039, 105, 878, 1484]. **directions** [1210, 708, 1142]. **Dirigent** [2322]. **disambiguation** [2171]. **disaster** [911]. **Discerning** [1193]. **discipline** [1124, 1550]. **disciplined** [1174]. **Discovery** [1951, 652]. **discrete** [102]. **Disjointness** [2188]. **disks** [468]. **dispatch** [695, 307, 349]. **Distance** [250]. **Distilling** [1751]. **distinguished** [726, 727]. **Distributed** [1772, 2351, 2356, 1975, 2352, 1324, 2063, 2047, 161, 149, 2253, 1750, 1332, 26, 91, 2251, 1214, 202, 2425, 2250, 1037, 1067, 1245, 1127, 181, 1433, 800, 624, 2015, 2075]. **Disturbance** [1919]. **diversity** [2028]. **Divide** [471, 1371, 203]. **divide-and-conquer** [1371]. **Divided** [1870]. **DIY** [1185]. **DMA** [597, 2336]. **DNA** [2365]. **DNA-Based** [2365]. **Do** [1429, 285, 600, 1887, 1011, 700, 1848]. **do-it-yourself** [1011]. **document** [1552]. **document-oriented** [1552]. **documentation** [1448]. **Does** [1550, 135, 356, 1701]. **dog** [43]. **DOJ** [931]. **Dolly** [542]. **Domain** [2049, 423, 2307, 263, 562, 1560, 1170, 1265, 1749, 2204, 417, 1915, 962, 798, 278, 993, 1690, 1909, 1890]. **Domain-aware** [2049]. **Domain-specific** [423, 2307, 263, 562, 1170, 1749, 2204, 417, 1915, 962, 798, 278, 1890]. **domains** [2188, 327, 1102]. **dominance** [1806]. **dominant** [1193]. **Don't** [1640, 2192]. **DoPE** [484]. **Doppio** [1647]. **double** [338]. **double-edged** [338]. **DoubleChecker** [1601]. **DoublePlay** [430, 807]. **doubts** [276]. **Down** [1081, 873, 2293, 451, 828, 505, 1623]. **downward** [2235]. **DRAM** [445, 822, 81]. **DReX** [1842]. **DRFX** [193, 433, 810]. **Driven** [1972, 2328, 1979, 145, 1562, 1168, 1659, 542, 127, 1113, 1280, 299, 2167, 1505, 1218, 1613, 1630, 2141, 2311, 648, 49, 2166, 2413, 115, 2391, 1638, 57, 1411, 2238, 1678, 364, 1425, 1017, 791, 1598, 594, 644, 1042, 1794]. **driver** [439, 816]. **drivers** [473, 2417, 1823]. **DRM** [2047]. **DSEL** [1094]. **DSL** [864, 2018, 801, 1947, 1558]. **DSL-based** [801]. **DSLs** [865, 43, 1722, 1008, 1910, 2298, 1822, 422, 2299]. **DSM** [1800]. **DSP** [107]. **DSU** [1758]. **Dual** [1940, 2355, 1307, 1114]. **dual-VM** [1307]. **dualising** [633]. **duck** [746]. **ducks** [330]. **dump** [208]. **dumps** [76]. **duplication** [1303]. **Durable** [1978]. **during** [1310]. **DVM** [906]. **Dyck** [1290]. **Dynamic** [1966, 393, 2367, 2071, 391, 67, 298, 444, 821, 886, 220, 1895, 891, 1648, 2327, 1897, 1266, 1957, 1654, 2051, 2005, 540, 1974, 1509, 145, 740, 354, 461, 2065, 2263, 1757, 395, 893, 1110, 488, 164, 914, 2126, 2202, 1026, 1740, 623, 2199, 1158, 1913, 1041, 2028, 2143, 847, 1785, 1712, 84, 350, 276, 1029, 131, 1300, 1406, 1310, 1298, 654, 1664, 1536, 1537, 913, 1552, 840, 1540, 166, 941, 297, 642, 300, 2287, 1668, 1030, 1694, 1554, 2387, 973, 1784, 916, 82, 351, 645, 900, 2419, 163, 1662, 784, 165, 1678, 996, 1579, 723, 782, 2076, 420, 283, 168, 666]. **dynamic** [2172, 1431, 961, 53, 1155, 548, 1232, 421, 687, 2430, 349, 457, 834, 1584, 2162, 1299, 1000]. **dynamic-multithreading** [941]. **Dynamically** [64, 38, 1412, 775, 963, 917, 2399, 89, 931]. **dynamically-typed** [917]. **Dynamics** [2042]. **dynamism** [1193]. **Dynamo** [461].

DynaMoW [623]. **DySel** [2367].

earliest [1246]. **earliest-deadline** [1246]. **early** [1300]. **early-exit** [1300]. **Earth** [602]. **ease** [1545]. **easier** [119]. **easy** [194, 1400, 206]. **Eating** [43]. **ECC** [95]. **economic** [2202]. **economics** [232]. **ecosystems** [602]. **edge** [2389, 2096]. **edge-based** [2096]. **edged** [338]. **Edit** [767]. **editing** [510, 1905]. **editor** [802]. **EDSL** [1465]. **EDSLs** [2300]. **Effect** [1816, 241, 755, 1529, 1597, 1817, 1745, 1103, 638, 78]. **effect-based** [638]. **effect-dependent** [755]. **effect-oriented** [78]. **Effective** [896, 2397, 152, 1411, 1728, 150, 116, 407, 489, 652, 1458, 1360]. **Effectively** [2185, 1510]. **effectiveness** [432, 809, 750]. **Effects** [2265, 1862, 1528, 1373, 2227, 249, 599, 2295, 1338, 733, 858, 1470, 2211, 266, 2243, 2190, 1095]. **Efficiency** [1969, 2321, 1234, 1236, 219, 559, 1440, 1037, 81, 2076]. **Efficient** [925, 1371, 348, 945, 1666, 1679, 2353, 1447, 1973, 1846, 1941, 1406, 1302, 1537, 848, 928, 871, 998, 2333, 720, 1699, 1907, 1942, 2000, 1209, 2001, 216, 1845, 2029, 1548, 275, 412, 433, 810, 1579, 2376, 1956, 273, 2044, 2092, 2132, 1920, 1798, 2330, 231, 1088, 2083, 479, 1163, 1601, 2151, 1105, 164, 2385, 194, 1681, 1332, 472, 619, 1587, 1029, 93, 958, 1787, 65, 414, 1578, 1670, 1322, 70, 357, 107, 1004, 1350, 1668, 193, 1748, 2198, 1085, 566, 544, 1687, 1821, 937, 1698, 1807, 1070, 1616, 2197, 1902, 1174, 547, 2068, 2402, 618, 142, 2093, 634, 1215, 2273, 213]. **efficient** [1345, 1314, 1794, 763, 2398, 935, 1000]. **Efficiently** [1842, 1056, 671, 2056, 2338, 840, 536, 1442, 195, 1433, 291]. **effort** [432, 809]. **EigenCFA** [398]. **Elaborating** [983, 2123, 2388]. **elaboration** [1738]. **Elastic** [108, 1206]. **Elasticity** [2046, 1928]. **elegant** [2402]. **Elephant** [1463]. **eliminated** [396]. **Eliminating** [1686, 1079]. **elimination** [1985, 457, 834]. **elision** [1349, 1353, 2067, 186]. **Elixir** [1036]. **elusive** [226]. **em-SPADE** [1590]. **embed** [2309]. **Embedded** [724, 1970, 2044, 951, 1010, 473, 109, 563, 853, 472, 1574, 470, 845, 1722, 841, 962, 848, 220, 840, 107, 849, 1209, 1240, 416, 993, 97, 2377, 839, 2299, 1199, 1909, 111, 1235, 1388, 1513, 229, 2175, 1248, 838, 907, 908]. **Embedding** [1817, 2218, 1910, 2298, 340, 2299, 989]. **embeddings** [1749]. **Emergent** [1903]. **Empirical** [1403, 2295, 1429, 1176, 1054, 2301, 782, 1677]. **Employ** [1942]. **emulation** [1666, 922]. **emulator** [1335, 1301, 579]. **enable** [1721, 956, 2258]. **enabled** [1066]. **Enabling** [1973, 2045, 1760, 160, 648, 543, 575, 165, 694, 85]. **encoding** [1583]. **encodings** [892, 718]. **Encryption** [1978, 1920]. **End** [1625, 2431, 1933, 198, 338]. **End-to-End** [1933, 1625, 2431, 198]. **ending** [1468]. **endpoint** [1719]. **Energy** [1062, 2360, 1587, 1578, 2333, 1936, 213, 180, 2385, 1586, 1358, 1177, 1770, 1440, 1771, 1178, 2093, 80, 2398]. **energy-conscious** [180]. **Energy-efficient** [213, 2385, 2093, 2398]. **Energy-harvesting** [2360]. **Energy-interference-free** [2360]. **EnerJ** [496]. **enforced** [224]. **Enforcement** [1836, 1951, 198, 1648, 641]. **Enforcing** [2322, 2009, 734]. **enforestation** [1171]. **Engage** [877]. **engine** [851, 263, 1341, 714]. **Engineering** [1101, 677, 43, 1736, 791]. **engines** [799, 458, 835, 2142, 2294, 855]. **Enhance** [2046]. **Enhanced** [577, 421]. **enhancement** [105, 429, 806]. **Enhancing** [910, 667, 1035, 1605]. **enough** [63, 2251, 1739]. **enqueuers** [580]. **Ensuring** [450, 827]. **enumerable** [2140]. **enumeration** [2070, 1092]. **Environment** [2054, 802, 707, 1202, 1053, 1393, 1305]. **Environmental** [2267]. **environments** [2028, 211, 1671, 208, 586, 2300, 213]. **Equality** [1012, 427, 1386]. **equational** [2205, 600]. **Equations**

[1864, 1285, 1532, 2233, 111]. **equirecursive** [2226]. **Equivalence** [1859, 637, 1139, 995, 24, 1620, 1425]. **equivalence-preserving** [637]. **equivalences** [2234, 1503]. **equivalent** [292]. **Era** [1946, 708]. **ERP** [1735]. **Error** [1968, 1939, 984, 1331, 2384, 870, 94, 2174, 619, 519, 848, 1621, 278, 1781, 2136, 469, 1985, 1235, 75]. **error-handling** [469]. **Error-Prone** [1939]. **error-tolerant** [984]. **Errors** [1938, 1939, 1525, 1679, 1514, 514, 1551, 111, 2395, 1619, 1012, 448, 825, 1524, 1982, 1448]. **ES5** [1891]. **Escape** [1970, 1039]. **essay** [332]. **Essence** [1867, 1499, 402]. **Establishing** [977]. **estimates** [670]. **Estimating** [2247]. **estimation** [2383, 545]. **estimator** [1358]. **ESXi** [2043]. **eval** [1148, 1049]. **Evaluating** [1842, 201, 590, 179, 507]. **Evaluation** [547, 217, 2040, 925, 346, 263, 677, 1480, 1191, 2123, 704, 917, 1227, 2298, 300, 2184, 66, 1633, 662, 2186, 353, 1892]. **evaluation-order** [2123]. **Event** [1972, 2413, 1339, 969, 1280, 1218, 1630, 2141, 2166, 343, 100, 1411]. **event-based** [1339]. **Event-Driven** [1972, 2413, 1280, 1218, 1630, 2141, 2166, 1411]. **event-loop** [969]. **EventBreak** [1754]. **events** [227, 535]. **eventual** [1502]. **eventually** [2020]. **ever** [2057]. **Every** [1869, 237]. **Everyone** [1869]. **everything** [428, 805]. **everywhere** [1485]. **evolution** [2293, 416, 787, 1185, 421, 687]. **evolvable** [271]. **evolving** [792, 1446]. **exactly** [1596]. **Example** [2282, 2034, 510, 2039]. **Example-directed** [2282]. **examples** [328, 2002, 591, 2003, 382, 509, 1650, 2249]. **Exascale** [114]. **exception** [660]. **exceptions** [1146, 2151, 433, 810, 2407]. **exchange** [131]. **Exchanging** [338]. **executable** [770]. **executables** [1632, 1857]. **execute** [1405]. **Executing** [1878, 261]. **Execution** [1941, 1057, 1940, 2355, 915, 2053, 2054, 1939, 145, 1449, 68, 1779, 238, 2382, 1200, 110, 1750, 1617, 1583, 1040, 1720, 564, 200, 871, 1707, 1404, 514, 2035, 525, 495, 57, 866, 2029, 1044, 1616, 475, 1045, 905, 573, 1182, 490, 1314]. **executions** [595, 1264, 2269, 641]. **executive** [484]. **exemplified** [800]. **exhaustive** [2168, 1282, 1788]. **existing** [310]. **exit** [1300]. **exotypes** [1606]. **expansion** [1273]. **expensive** [396]. **Experience** [1818, 256, 1001, 339, 1819, 1394, 1011, 269, 1393, 779, 1573, 614, 2297, 1098, 1820, 50]. **Experiences** [353, 1655]. **experiment** [276, 1550, 801]. **experimental** [1770]. **experiments** [1140]. **expert** [955, 1185]. **experts** [2028, 279]. **explain** [1014]. **Explicit** [778, 2154, 565, 1386]. **Explicitly** [1009]. **Exploiting** [2046, 2347, 528, 1365, 1085, 672, 1063, 1588, 189, 867, 523, 1800]. **Exploration** [1585, 1439, 1586, 2167, 1344, 2314, 980, 104]. **explorative** [1894]. **exploratory** [801]. **EXPLORER** [2167]. **Exploring** [455, 832, 2009, 1814, 1031, 2050, 1345]. **Exposing** [2395]. **Expressing** [1346, 1609, 2134, 868]. **expression** [387, 2124, 353, 1345, 935]. **expressions** [268, 2161, 1473, 1981, 878, 2119, 1362]. **Expressive** [378, 225]. **ExpressOS** [1197]. **Extended** [1228, 582]. **Extending** [48, 929, 715, 1026]. **extensibility** [663, 1100, 173]. **Extensible** [1904, 1470, 354, 2118, 1397, 1543, 2211, 1597, 1413, 1142, 749, 922]. **extension** [692, 1590, 623, 1911, 2239, 482, 1171, 1634]. **extensions** [1156, 1391, 694, 2175, 777, 2398]. **EXTERIOR** [1307]. **external** [1307, 70]. **extract** [1027]. **extracted** [1590]. **Extracting** [1720, 2002, 884]. **extraction** [1247, 1801, 1650, 412]. **extrapolation** [1038, 569]. **extremal** [2038]. **Extreme** [124]. **eye** [1804].

F [2224, 2226, 1607, 1575]. **F#** [2420, 273]. **F*** [773, 2243]. **F-bounded** [1607]. **F4F** [699]. **Fabular** [2244]. **FACADE** [1965]. **facets** [740]. **facilitate** [76]. **Facilitating** [909]. **facility** [568, 1178]. **facto** [2388]. **Factor** [351]. **factorizations** [944]. **factors** [332]. **factual** [1525]. **fail** [333]. **Failure** [2350, 1181, 1681, 650, 1176]. **Failure-Atomic** [2350]. **failure-aware** [1681]. **failures** [1264, 543]. **Fair** [1508, 2252, 1698]. **Fairness** [90, 2321]. **Faith** [332]. **false** [460, 837, 640, 1676]. **families** [1725, 1532, 1827, 2214, 2213]. **Family** [1553, 1159, 1555, 306, 2214]. **Family-based** [1553, 1159, 1555]. **fanout** [1317]. **fanout-optimal** [1317]. **farm** [488]. **Fast** [2320, 2163, 875, 1254, 546, 2412, 1325, 1702, 544, 1256, 1759, 1777, 128, 545, 1290, 2061, 940, 437, 814, 1808, 1663, 936, 2194, 2032, 1413, 56, 2096, 2010, 2129, 2182, 1337, 1635, 583]. **Faster** [1169, 1840, 2336, 927, 2264, 888]. **FastLane** [1326]. **Fault** [1122, 1234, 1331, 1358, 2253, 944, 1212, 1317, 1184]. **fault-tolerant** [2253, 1317]. **Faults** [452, 829, 1446]. **FBCS** [726]. **FC** [1386]. **fear** [272]. **Feat** [1092]. **Featherweight** [117, 1182]. **Feature** [785, 1555, 786, 1906, 1160, 61, 419]. **feature-based** [1555]. **feature-oriented** [419]. **features** [60, 62, 761, 2391, 1160, 61]. **featuring** [2117]. **feedback** [1259, 1443, 1252, 1794]. **feedback-directed** [1443]. **feedback-driven** [1794]. **Fence** [2080, 1921, 2158]. **Fence-Free** [1921]. **Fences** [1955]. **feval** [1540]. **Few** [1929]. **Few-to-Many** [1929]. **FFT** [1691]. **Fiat** [1886]. **field** [1624, 2195, 2380]. **field-sensitive** [2380]. **fields** [1608]. **FIFO** [1582]. **File** [2331, 2325, 2149, 921, 1213]. **filestores** [626]. **filling** [1660]. **filter** [1514]. **filtering** [945, 67, 460, 837]. **filters** [1155]. **financial** [2128]. **find** [893]. **Finder** [279]. **Finding** [2033, 2159, 2357, 1781, 178, 1073, 506, 1284, 328, 77, 700]. **Fine** [1212, 1940, 551, 1713, 1056, 2188, 1545, 99, 653, 1218, 378, 88, 1988, 1178, 868, 1130, 594, 349]. **Fine-grain** [1713, 99, 653, 88]. **Fine-grained** [1212, 551, 1056, 2188, 1545, 1218, 378, 1988, 1178, 868, 1130, 594, 349]. **finish** [117]. **finite** [994, 738]. **finitely** [1291]. **Firepile** [796]. **First** [1606, 681, 2114, 1439, 1246, 2121, 950, 602, 1453, 2420, 645, 2105, 2299, 2021, 355, 1060, 606, 321, 1739]. **First-class** [1606, 681, 2121, 2420, 2105, 2299, 355, 1060, 606, 321]. **first-order** [2114, 645, 1739]. **Fissile** [1485]. **fitting** [282]. **fix** [2212, 2172]. **fixed** [631, 1292, 2401]. **fixed-point** [631]. **fixing** [515, 1782]. **f}lash** [1242, 1244, 113, 1242]. **FlashExtract** [1650]. **FlashMeta** [2144]. **FlashRelate** [2002]. **flattening** [1323]. **FlexBFS** [950]. **flexibility** [203]. **Flexible** [326, 1420, 88, 723, 694, 2164, 866, 794, 1726, 1155, 95, 2022]. **FlexNIC** [2324]. **FlexVec** [2434]. **Flikker** [445, 822]. **Flint** [1782]. **Flix** [2401]. **floating** [2264, 1449, 1146, 893, 1679, 2173, 2393, 183, 1981, 1604]. **floating-point** [2264, 1449, 1146, 893, 1679, 2173, 2393, 183, 1604]. **Flow** [668, 1873, 1972, 1856, 2370, 1953, 1624, 740, 1757, 2147, 36, 2126, 2431, 1112, 2167, 843, 2274, 298, 241, 1631, 1249, 913, 1233, 2290, 491, 1461, 1473, 2287, 1653, 398, 844, 723, 999, 606, 1356, 2430, 1492]. **Flow-sensitive** [668]. **FlowDroid** [1624]. **flows** [2154]. **FlumeJava** [194]. **Fly** [1940, 1961, 1449, 1990, 1451, 1810, 457, 834]. **focus** [22]. **Folding** [1749, 1806]. **food** [43]. **footprint** [685]. **forcing** [1188]. **Foreign** [1829, 166]. **foresight** [1275]. **forest** [942, 626]. **forever** [717]. **Forge** [1558]. **forget** [2127]. **fork** [139, 1748]. **fork-join** [139]. **form** [2161]. **Formal** [982, 1050, 362, 1267, 1158, 793, 770, 1721, 1640, 2012, 2014, 1642, 596, 800]. **formalization** [2284]. **Formalizing** [762]. **Formally** [2206, 1851, 1427, 2015]. **Formally-Verified** [1851]. **format** [582]. **formation** [1300]. **FORMLESS** [845].

forms [2132]. **formulae** [265, 636]. **formulas** [2244, 1510]. **formulation** [2187]. **Forsaking** [1416]. **FORSETI** [2202]. **Fortifying** [257]. **Fortran** [1682]. **forward** [619, 1309]. **forwards** [1467]. **foundation** [608, 1158, 1750, 857, 518]. **Foundational** [2118]. **Foundations** [1765, 1488, 46, 755]. **Fourier** [583]. **FPGA** [953, 619, 282]. **FPGAs** [1932]. **fragmentation** [2163, 2191, 176]. **fragmentation-tolerant** [176]. **fragments** [514]. **Framework** [2334, 1941, 1975, 1978, 2041, 2051, 1562, 180, 1592, 2061, 1270, 747, 1027, 1543, 1916, 923, 1312, 958, 1747, 1392, 2425, 1650, 49, 884, 1668, 261, 1695, 539, 1295, 2081, 2144, 1328, 924, 801, 699, 1605, 581, 108, 2015, 418, 1684, 2072, 907]. **framework-based** [699]. **Frameworks** [1944, 1168, 644]. **Free** [1876, 1925, 2375, 1935, 1971, 1921, 856, 1371, 1466, 2110, 153, 2152, 2360, 1768, 1041, 2219, 576, 2274, 487, 2161, 1082, 580, 936, 1707, 972, 2080, 1702, 2120, 592, 965, 1705, 2094, 182, 513, 964]. **Free-Cooled** [1935]. **free-form** [2161]. **free-lunch** [1768]. **Freecursive** [1925]. **Freedom** [697, 1123]. **Freefinement** [728]. **Freer** [2211]. **Freeze** [1500]. **Frenetic** [625]. **FREng** [726]. **frequencies** [1067]. **Fresh** [380, 255]. **Fresh-register** [380]. **freshmen** [205]. **friendlier** [1078]. **Friendly** [1670, 2333, 938, 1911]. **front** [338]. **FRP** [1095, 1739, 2127]. **FRPNow** [2127]. **FRS** [726]. **FSM** [1961]. **FTL** [1242]. **Fu** [2215]. **Full** [1873, 1102, 1335, 1545, 2218, 1415, 2376, 579]. **full-system** [1335, 2376, 579]. **Fully** [1434, 2236, 1132, 899, 765, 365, 1504, 1133]. **Fully-abstract** [2236]. **Fun** [1370]. **function** [411, 971, 1588]. **function-block-based** [411]. **Functional** [258, 1740, 2212, 2131, 1382, 614, 1372, 602, 988, 1014, 2102, 2125, 2115, 273, 237, 2114, 1384, 2104, 1105, 611, 9, 2103, 1093, 1288, 1503, 2113, 1370, 1092, 2396, 268, 1749, 731, 1381, 190, 722, 1366, 189, 617, 610, 633, 2228, 2120, 404, 1394, 1738, 243, 605, 996, 2119, 618, 1108, 718, 1096, 1475]. **functionality** [2155]. **Functions** [1854, 1971, 771, 1480, 1093, 990, 1827, 1229, 2038, 1911, 1426, 340, 1245, 1161, 1651, 1258, 1739]. **functor** [365]. **Functors** [1833, 2210, 347]. **fuse** [2075]. **fusion** [2073, 719, 1089, 1473, 1365, 1695]. **Future** [1933, 1250, 2127]. **futures** [1688, 310]. **fuzzers** [1269]. **Fuzzing** [2049, 1987].

G [279]. **G-Finder** [279]. **GADTs** [2254, 2137]. **Galois** [1479, 2169]. **GAMBIT** [116]. **Game** [2359, 1520]. **games** [1496, 146]. **gap** [42, 2207]. **gaps** [1660]. **Garbage** [1964, 517, 712, 234, 223, 856, 1231, 1815, 221, 1809, 1434, 2193, 2426, 1990, 1192, 707, 2427, 1595, 780, 1077, 703, 261, 1455, 227, 176, 1454, 1814, 1759, 222, 232, 618, 229, 1810]. **garbage-collected** [261]. **garbage-collection** [222]. **GC** [2192, 291, 1463]. **GCM** [57]. **Gene** [1347]. **Gene/Q** [1347]. **General** [1273, 1703, 2071, 946, 1029, 1521, 2305, 1295, 368, 496, 2130, 1524]. **general-purpose** [1029, 2305]. **Generalising** [633, 2283]. **generalization** [2429, 1821]. **Generalized** [488, 2381, 1346, 1084, 1365, 50]. **generated** [797]. **Generating** [2312, 54, 2366, 57, 2300, 2119, 33, 792, 1458, 2256, 34, 427, 503, 510, 1413, 1558]. **Generation** [2372, 1560, 790, 425, 623, 437, 814, 1606, 1428, 504, 2090, 928, 974, 1262, 941, 943, 1514, 2246, 2220, 2297, 147, 1754, 2063, 422, 1788, 794, 1252, 800, 1579, 142, 104]. **Generative** [2315, 374, 1562, 58, 1397, 43, 2314]. **generator** [518, 423]. **generators** [1469, 724, 1556, 2310, 1777]. **generic** [1088, 1010, 2226, 1429, 337, 857, 44, 311].

generically [1512]. **genericity** [418]. **generics** [1767, 675, 839, 2022]. **genomic** [129]. **gentle** [236]. **geometric** [790]. **Geometry** [384, 620, 486, 1372, 2278, 1115]. **gesture** [2386]. **Getaway** [1970]. **getters** [1148]. **Getting** [1838, 1607, 2212, 1081]. **GHC** [1087, 2205, 2204, 343, 344, 1476]. **GhostRider** [1924]. **ghosts** [1790]. **Giga** [2168]. **Giga-scale** [2168]. **Ginseng** [1659]. **Girard** [1868]. **GKLEE** [943]. **glass** [275]. **glitches** [2007]. **Global** [481, 2163, 473, 1123, 2070, 1699, 1076, 2149, 1686, 874, 1354, 578, 1337, 1316]. **Globally** [1617, 1357]. **gloves** [1408]. **go** [2196]. **Goal** [1951]. **Goal-Directed** [1951]. **goals** [274]. **going** [570]. **Good** [1938, 1716, 1596, 330]. **GoTM** [1216]. **GPCE** [42]. **GPGPU** [1205, 1343, 1206, 924, 170, 155, 1683]. **GPGPUs** [957]. **gprof** [588, 521]. **GPS** [1790]. **GPU** [2083, 1958, 126, 1003, 1021, 1173, 1437, 1334, 1760, 923, 494, 2045, 2305, 887, 950, 340, 1366, 933, 934, 1959, 2081, 129, 1989, 2091, 2395, 954, 701, 2088, 87, 1321, 1316, 128, 457, 834, 572, 935]. **GPU-based** [935]. **GPUDet** [1173]. **GPUDirect** [2042]. **GPUfs** [1213]. **GPUs** [1960, 1685, 127, 1813, 590, 854, 585, 943, 1717, 1077, 1329, 796, 398, 1713, 2082, 1213, 1337, 1684, 1345, 952]. **GPUswap** [2045]. **GPUVerify** [1021]. **GRace** [572, 1149]. **gracefully** [2155]. **Gradual** [1855, 675, 1845, 1513, 1060, 2285, 1766, 2256, 2255, 1151, 766, 1745, 2257, 2190, 1892]. **gradualizer** [2256]. **gradually** [1535]. **gradually-typed** [1535]. **grain** [99, 653, 672, 88, 1713]. **Grained** [1940, 1056, 2188, 1545, 1218, 378, 480, 1212, 3, 1147, 551, 1988, 1178, 868, 1130, 594, 349]. **grammar** [2148]. **grammars** [35, 1333, 413, 1773]. **granularity** [669]. **Graph** [1972, 1432, 233, 161, 1346, 590, 2098, 254, 584, 1254, 1461, 934, 1085, 294, 2378, 369, 1036, 2031, 1807, 2082, 2091, 1328, 507, 2088, 2075, 2074, 952]. **graph-based** [294, 2378]. **graph-parallel** [2075]. **graph-structured** [161, 2074]. **Graphical** [1849, 1936, 2312, 604]. **graphics** [925, 865, 583, 458, 835, 855, 2314]. **Graphs** [1873, 1950, 1496, 1423, 1246, 1112, 1389, 1249, 2009, 988, 2082]. **Green** [180]. **GreenSwitch** [1177]. **GreenWeb** [2398]. **grey** [748]. **grid** [561]. **group** [243]. **grow** [250]. **Growing** [802, 256]. **growth** [1811]. **GStream** [2082]. **guarantee** [1257, 764]. **guaranteed** [313]. **guarantees** [77, 1382, 2009, 2066]. **guarded** [1379, 101]. **guards** [2137]. **GUESSTIMATE** [181]. **guest** [1657, 1307, 554]. **guest-OS** [1307]. **GUI** [1438, 2207, 421]. **guidance** [1312]. **guide** [719, 408]. **Guided** [1438, 2019, 846, 2259, 1300, 2159, 1644, 22, 1754, 28, 2232]. **Guiding** [1089]. **Guilt** [2219]. **GUIs** [1288, 1552]. **gummy** [1903]. **Gunrock** [2088].

hackage [339]. **HACMS** [1721]. **halide** [2018, 1297]. **HALO** [1137]. **Handlers** [1374, 1155, 1816]. **Handles** [710]. **handling** [2384, 278, 343, 469, 2376, 555]. **happened** [1887]. **happens** [2085]. **happens-before** [2085]. **HappyJIT** [776]. **hardness** [2241]. **Hardware** [2332, 431, 808, 2360, 1218, 2055, 1924, 2335, 1922, 2366, 1979, 1953, 2358, 2330, 1349, 1181, 125, 856, 1815, 1405, 432, 809, 1340, 453, 830, 620, 2086, 1086, 1202, 282, 491, 66, 42, 1686, 916, 1687, 1186, 2029, 1814, 439, 816, 1031, 2115, 1174, 556, 1215, 2064, 922]. **Hardware-Assisted** [2055]. **Hardware-OS** [2335]. **Hardware-Software** [2360, 1924]. **Hardware/Operating** [2332]. **Hardware/Operating-System** [2332]. **hardware/software** [1186, 556]. **harmful** [1188]. **Harmonizing** [1258]. **harmony** [614]. **harnesses** [729]. **harvesting** [2360]. **hash** [970, 1902, 2182]. **hash-array** [2182]. **hashing** [1469, 427, 964]. **Haskell** [1088, 1465, 1818, 1468, 1737, 2126, 462,

1001, 2203, 1827, 725, 1984, 2204, 260, 1481, 341, 1472, 720, 1473, 1474, 337, 340, 342, 986, 1828, 1819, 1823, 1817, 1364, 2218, 269, 2125, 1376, 723, 2213, 335, 1099, 1744, 1137, 2215, 718, 1477, 1654, 338]. **Hasochism** [1472]. **Haswell** [1814]. **HAWKEYE** [652]. **HCloud** [2353]. **HdpH** [1822]. **health** [157]. **heap** [1460, 1276, 2230, 2202, 299, 530, 1510, 1811, 300, 406, 19, 23, 529, 291, 981, 714, 225, 1456, 513]. **heap-manipulating** [19, 23]. **heaps** [1815, 703, 437, 814]. **heartbeats** [157]. **Helium** [2018]. **help** [803]. **Helper** [139, 459, 836]. **Helping** [803, 505]. **Hera** [288]. **Hera-JVM** [288]. **Herding** [1602]. **HERMIT** [1087, 2205]. **Heterogeneity** [2046]. **Heterogeneous** [1960, 2332, 2333, 2346, 1701, 2371, 281, 537, 325, 562, 1586, 939, 2099, 1179, 1002, 91, 1342, 960, 1009, 2309, 288, 1208, 1152, 495, 1713, 844, 954, 465, 108, 971, 1305]. **Heterogeneous-ISA** [2371]. **HeteroVisor** [2046]. **heuristic** [971]. **hidden** [447, 824, 1831]. **hierarchical** [1056, 2098, 1901, 2008, 1076, 1431]. **hierarchically** [2422]. **hierarchies** [13]. **Hierarchy** [2048, 621, 925, 1432, 560]. **High** [2331, 2077, 2289, 2349, 1126, 2324, 2348, 993, 2042, 953, 1465, 1685, 932, 1762, 1679, 1308, 1260, 1606, 90, 854, 1786, 1243, 2007, 2018, 1011, 1433, 1548, 1696, 1142, 2314, 989, 2119, 1558, 1805, 651, 1476, 2088, 1320, 935]. **High-Assurance** [2331, 1011]. **high-coverage** [651]. **High-Density** [2349]. **High-level** [1126, 953, 854, 2007, 1433, 1548, 1142, 989, 2119]. **High-Performance** [2348, 2289, 932, 1762, 1260, 1606, 90, 2018, 1696, 2314, 2119, 1805, 1476, 2088]. **Higher** [1837, 248, 504, 41, 731, 1381, 2424, 1835, 1045, 2114, 1384, 1728, 1478, 1363, 1612, 1503, 616, 249, 17, 1400, 997, 1229, 2235, 241, 2266, 20, 1747, 2133, 308, 501, 1004, 2228, 991, 1013, 2116, 2023, 404, 1530, 1484, 2267, 1506, 1286, 1396, 1108, 718, 1201]. **Higher-Order** [1837, 248, 504, 41, 731, 1381, 2424, 1045, 2114, 1384, 1728, 1478, 1363, 1612, 1503, 616, 249, 17, 997, 1229, 2235, 241, 2266, 20, 1747, 2133, 308, 501, 1004, 2228, 991, 1013, 2116, 2023, 404, 1530, 1484, 2267, 1506, 1286, 1396, 1108, 718]. **higher-rank** [1400]. **higher-ranked** [241]. **highest** [274]. **Highlights** [1569, 1225]. **Highly** [2051, 1918, 925, 221, 910, 1717, 594]. **Highly-Available** [1918]. **highly-threaded** [1717]. **Hindley** [1738]. **hindsight** [867]. **hings** [2319]. **hinted** [1454]. **hints** [1708, 654]. **HipHop** [1795, 1047]. **HIPStR** [2371]. **history** [1545]. **hitchhiker** [408]. **HLIO** [2126]. **Hoare** [726, 1397, 1395, 2392, 1396]. **Hoare-style** [1395, 1396]. **Hobbits** [718]. **hoc** [615, 2183]. **holes** [1278, 511]. **Holistic** [2352, 1204, 1574, 219]. **Hollywood** [227]. **Homogeneous** [306]. **homomorphism** [633]. **Homotopical** [1742]. **Homotopy** [1835]. **Homotopy-Initial** [1835]. **Honu** [1171]. **Hoopl** [345]. **HOP** [774]. **hope** [332]. **hopefully** [1468]. **horizontal** [1985]. **host** [1760, 1649]. **hosted** [779]. **hosts** [1304]. **hot** [526]. **HotDrink** [1166]. **HOTL** [1201]. **HotWave** [53]. **Howard** [239]. **HPL** [593]. **HSPT** [2044]. **HTM** [1216]. **HTML5** [2138]. **hull** [956]. **human** [1051, 332]. **human-based** [1051]. **HW** [1587, 42, 1232, 1634]. **HW/SW** [1587, 1232, 1634]. **HW/SW-synthesis** [1634]. **Hybrid** [809, 1289, 1922, 2041, 557, 1957, 662, 1623, 2358, 471, 875, 930, 894, 849, 1719, 152, 2222, 1788, 2091, 2197, 1242, 432]. **Hygiene** [1867]. **Hygienic** [2108, 1891]. **Hylomorphisms** [1874]. **Hyperstream** [1136]. **Hypervisor** [2055, 1657, 543, 215, 1672]. **hypervisors** [214].

I/O [1657, 1105, 1033, 896, 892, 2323, 1942, 343, 2041, 1802]. **i3QL** [1775]. **Iago** [1194]. **ICFP** [1229]. **Icon3** [353]. **Icon3-like** [353]. **Ideas** [2339]. **idempotence** [1122].

idempotent [1182, 895]. **identification** [2090, 411, 314]. **identifiers** [2301, 1538]. **Identifying** [1086, 1720, 924]. **IDEs** [302]. **idiomatic** [1467]. **Idle** [2426, 2048, 83, 319, 87]. **if** [1887, 649, 2125]. **IFRit** [1041]. **ignore** [2384]. **II** [2278]. **III** [384, 1258]. **illuminating** [1757, 189]. **I'm** [2251]. **Image** [2349, 1948, 864, 585, 1297]. **imaging** [1347]. **Immix** [1408]. **immutability** [1016, 1065, 311]. **Immutable** [661, 2182, 2130]. **impact** [775, 249, 327, 2057, 276, 1644, 786, 658]. **impediments** [652]. **imperative** [1478, 636, 2024, 664, 2116, 1803]. **impersonators** [1069]. **Implementability** [1955]. **Implementation** [1977, 2344, 1979, 2040, 2044, 263, 619, 1904, 1493, 950, 933, 874, 1256, 132, 1376, 1558, 2068, 935]. **Implementation-Aware** [1977]. **Implementations** [2331, 1494, 2394, 1319, 511]. **implementing** [1170, 293, 1172, 2015]. **implication** [2260]. **Implications** [1933, 2065]. **Implicit** [611, 415, 1716, 565, 2317, 857, 482, 2216]. **implicitly** [669]. **implicits** [296]. **impromptu** [324]. **Improve** [2043, 263, 202]. **Improved** [1536, 439, 816, 229, 1718]. **Improving** [1646, 1969, 2203, 847, 1236, 460, 837, 1300, 2052, 106, 1593, 136, 1994, 2327, 1928, 1206, 210, 2216, 429, 806, 1976, 1216, 1298, 1205, 118, 1315, 1981, 469, 2076, 1407, 1326]. **impure** [9, 1116]. **In-place** [1693, 1692]. **in-stadium** [2297]. **in-vivo** [449, 826]. **inclusion** [301, 933]. **inclusion-based** [301, 933]. **inconsistencies** [286]. **Inconsistent** [2357]. **Increased** [2368]. **increasing** [81]. **Incremental** [1963, 2180, 1929, 426, 634, 665, 2187, 2143, 1613, 525, 310, 577, 229]. **incrementalization** [880]. **incrementalizing** [1612]. **Indentation** [1830, 1143]. **Indentation-sensitive** [1830, 1143]. **independent** [512, 1799, 2291, 403]. **index** [706]. **index-aware** [706]. **indexed** [1109, 366, 760, 1298, 1089]. **indexes** [688]. **indirect** [1298]. **indirection** [16]. **induction** [2024]. **Inductive** [1428, 1112, 1835, 621, 2225, 2230, 2113, 277, 737, 2240, 2144, 524]. **industrial** [761, 243, 800]. **industrial-strength** [761]. **industry** [1735]. **inefficient** [263]. **inefficiently** [177]. **inefficiently-used** [177]. **inequality** [1141]. **inexact** [1596]. **Inferable** [199]. **Inference** [1876, 1854, 2355, 234, 393, 1169, 500, 2164, 752, 2254, 870, 1428, 2261, 384, 875, 1065, 2027, 413, 2390, 898, 2150, 2391, 766, 13, 1608, 641, 777]. **Inferring** [566, 1767, 975, 2240, 1291]. **infinitary** [994]. **infinite** [1104, 1496, 995, 1039]. **influence** [1054]. **influential** [1223]. **inform** [339]. **Information** [733, 1856, 2370, 1953, 740, 2154, 36, 2126, 775, 2431, 848, 491, 1724, 723, 999, 1643, 2430, 1492]. **Information-Flow** [2370, 1953, 2126, 2431, 1492]. **Infrastructure** [1707, 789, 550, 416, 973]. **Infrastructure-free** [1707]. **Infrastructures** [2354, 57]. **ing** [2105]. **inhabitant** [2122]. **inhabiting** [610]. **inheritance** [695, 2303, 1416, 362, 1164]. **Initial** [1719, 1835]. **initialisation** [697]. **initialization** [1547, 313]. **Initiated** [1956]. **Injecting** [1446]. **injection** [650, 741]. **Injective** [2213]. **InkTag** [1195]. **inline** [1829]. **inlining** [2008]. **innovation** [125]. **Input** [145, 1441, 862, 2399, 1445, 1138, 2017, 2003, 382, 1261, 1514, 1788, 855, 283, 666, 155, 1794]. **input-adaptive** [1794]. **input-aware** [855]. **input-centric** [283]. **input-consciousness** [666]. **Input-covering** [1441]. **input-data** [155]. **Input-driven** [145]. **input-output** [1138, 2003, 382]. **Input-sensitive** [862]. **inputs** [1679, 1447, 2399, 1620]. **ins** [766]. **insertion** [1535, 2158]. **insertions** [1808]. **insight** [632]. **Inspired** [2340]. **instability**

[1449, 2173]. **Instance** [270, 613]. **instanceof** [1083]. **instances** [270]. **Instant** [1413]. **instantiation** [2303, 1145]. **instantiation-based** [1145]. **instead** [1283]. **instruction** [34, 892, 2404, 480, 840, 96, 1237, 403, 2376, 172, 1584]. **instruction-scheduling-aware** [480]. **instructions** [1236, 1365]. **Instrumentation** [290, 2051, 914, 1668, 557, 1667]. **Integer** [1951, 1106, 2012, 1514]. **integer-pointer** [2012]. **integers** [183]. **Integrated** [648, 1978, 714, 2262, 1398, 1775, 1053]. **Integrating** [109, 1058, 1834, 32, 1051, 1213]. **integration** [423, 801, 666]. **Integrity** [1925, 450, 827, 93, 1653]. **Intel** [1474]. **Inter** [92, 459, 836, 2262, 531, 2258, 909, 1063]. **inter-application** [909]. **inter-array** [2262]. **inter-component** [2258]. **Inter-core** [92, 459, 836]. **inter-procedural** [531]. **inter-sequence** [1063]. **Interacting** [1414]. **interaction** [2242, 788, 2278, 61]. **interactions** [785, 298, 909]. **Interactive** [1929, 2328, 2034, 1361, 1087, 1658, 2429]. **Interactively** [2154]. **intercepting** [694]. **intercession** [352]. **interconnect** [65, 702]. **interdependencies** [918]. **interesting** [2115]. **Interface** [1880, 2335, 1194, 1911, 295, 1520, 660]. **Interfaces** [2041, 2361, 1752, 2312, 1166, 59, 1481, 604, 166, 1754, 1696, 50]. **Interference** [2351, 2360, 1041, 753, 390]. **interference-free** [1041]. **interfering** [1739]. **Interleaved** [2354, 729]. **Intermediate** [2342, 403, 762]. **Intermittent** [2360, 2035, 443, 820]. **internal** [2096]. **Internally** [940]. **Internet** [1152]. **interoperability** [2289]. **interoperable** [1682]. **interpolants** [39]. **interpolation** [1145]. **interposition** [1069]. **Interpretation** [1976, 348, 187, 747, 1027, 1479, 1483, 2282, 387, 622, 2160]. **interpreter** [2224, 774, 1663, 1686]. **interpreters** [2169, 1915, 2317, 2184, 1287, 321, 1154, 1792]. **Interprocedural** [1875, 873, 2167, 1623]. **interrelated** [47]. **Interrupt** [2040, 364, 2376]. **interrupt-driven** [364]. **interruptible** [2417]. **intersection** [983, 2133]. **interview** [726]. **Intra** [1931, 148, 2262]. **Intra-application** [148]. **intra-array** [2262]. **Intra-Kernel** [1931]. **Intrinsic** [1971]. **introducing** [1095]. **introductory** [1252]. **Introspection** [1303, 2050, 1307, 1656]. **Introspection-based** [1303]. **Introspective** [997, 1645]. **intrusive** [1240]. **Invalid** [1848]. **Invalidations** [1956]. **invariance** [1109]. **invariant** [1428, 49]. **invariant-driven** [49]. **Invariants** [1882, 1437, 1485, 299, 2260, 1197, 2240, 1788, 1184, 285]. **Inverse** [2306, 527]. **inversion** [524]. **Invertible** [334]. **Investigating** [1551, 787, 2301]. **investigation** [2295]. **Invited** [2339]. **Invited-Speakers** [2339]. **invocation** [415]. **IO** [691, 1476]. **IOMMU** [1942, 2336, 2042]. **IOV** [2042]. **IR** [2290]. **Iris** [1882]. **Ironclad** [1419]. **irregular** [2434, 560, 559, 928, 454, 831, 2063]. **irregular/regular** [2063]. **irregularities** [457, 834]. **ISA** [1666, 2268, 2371, 2044, 2361]. **ISAs** [440, 817]. **isolated** [2432]. **Isolating** [514]. **Isolation** [1435, 316, 290, 690]. **issues** [2301]. **it/faster** [1729]. **iteration** [2263]. **iterations** [1424]. **Iterative** [413, 701, 201, 1331, 2378, 1800]. **iterators** [1161, 1792]. **iThreads** [1963]. **IV** [620]. **Ivory** [2219]. **Ivy** [2429].

Jalapeno [463]. **JANUS** [867]. **Java** [1767, 281, 1163, 1866, 1129, 2168, 1170, 1228, 1549, 2161, 1429, 1671, 1025, 1086, 1301, 2290, 660, 2176, 1554, 2177, 51, 1520, 179, 186, 1443, 216, 287, 693, 1019, 1758, 1031, 303, 678, 1083, 712, 2197, 534, 2185, 52, 53,

197, 685, 421, 687, 838, 1812, 1028, 311, 879]. **Java-based** [1671, 1301]. **Java-compatible** [281]. **Java-like** [303]. **Java-to-JavaScript** [2290]. **JavaGI** [50]. **JavaScript** [1646, 1894, 1486, 1339, 779, 1752, 1048, 1891, 647, 1421, 2295, 1132, 730, 875, 1444, 1050, 1534, 2294, 1537, 1896, 1595, 2290, 297, 1533, 2166, 1899, 1049, 1148, 1539, 2014, 2081, 163, 679, 1420, 1513]. **JAWS** [2081]. **Jazz** [1052]. **JDMM** [1812]. **Jennisys** [1038]. **JEqualityGen** [427]. **JET** [660]. **Jinn** [166]. **JIT** [1153, 2104, 317, 1026, 775, 776, 1025, 1310, 684, 2291, 1603, 908]. **JIT-based** [2291]. **JITs** [1664]. **job** [71]. **join** [139, 47, 673]. **Joint** [83]. **jQuery** [1753]. **JS** [1894]. **judgment** [2202]. **jumping** [2147]. **jungle** [1005]. **Just** [600, 2419, 512, 488, 840, 10, 217]. **Just-in-time** [2419, 512, 488, 840, 10, 217]. **JUSTDO** [2350]. **JVM** [463, 1033, 2394, 2405, 1804, 288, 1758, 2182, 1235]. **JVMs** [1757, 908].

K-Java [1866]. **Kahn** [104]. **Kconfig** [2302]. **keep** [1746, 2125]. **Kernel** [2367, 1931, 1972, 2344, 2073, 450, 827, 1673, 469, 1293]. **Kernel-based** [2367]. **kernels** [953, 1021, 2417, 1437, 635, 928, 887, 2018, 1769, 1206, 954]. **key** [1808, 2250]. **key-value** [2250]. **keynote** [2221, 2222, 2297, 1263, 2223]. **Kind** [646, 1386]. **kinds** [1061]. **kinematics** [425]. **Kinetic** [1950]. **Kismet** [670]. **Kitsune** [1029]. **KJS** [2014]. **Kleene** [1859]. **Kleenex** [2245]. **knobs** [444, 821]. **knot** [918]. **know** [2057, 1887, 700]. **knowledge** [1068, 142]. **known** [1887]. **Kodu** [375]. **KRASH** [147]. **Kremlin** [521, 588]. **Kripke** [366, 367, 732, 638]. **Krivine** [1750].

LAB [1440]. **labelled** [1516]. **labs** [1474]. **Lambda** [1861, 984, 2218, 2111, 1114, 1727]. **Lambda-Bar** [1114]. **LaminarIR** [1992]. **land** [1655]. **Landin** [1143]. **Language** [1842, 512, 1876, 1870, 325, 1576, 2352, 2291, 1859, 1431, 863, 1953, 637, 467, 1056, 1914, 424, 281, 692, 2104, 471, 400, 932, 263, 1482, 1026, 563, 2099, 1398, 9, 2103, 623, 1635, 320, 1260, 2253, 1265, 663, 802, 1100, 409, 453, 830, 1087, 2288, 626, 2313, 625, 1574, 235, 1505, 1904, 1281, 2289, 67, 455, 832, 417, 854, 1915, 917, 464, 2165, 302, 648, 1664, 1895, 166, 929, 491, 798, 49, 1403, 682, 1391, 2239, 1648, 375, 2401, 1775, 339, 1018, 2116, 627, 351, 423, 482, 1297, 1639, 291, 2124, 2377, 2299, 438, 815, 303, 266, 1599, 199]. **language** [2402, 694, 1647, 1789, 289, 32, 182, 734, 2398, 2175]. **Language-based** [863]. **Language-independent** [512, 2291]. **language-integrated** [1398, 1775]. **language-level** [1056]. **Languages** [1862, 493, 669, 2307, 1143, 234, 1010, 1110, 1371, 1542, 1412, 1612, 1026, 775, 256, 2113, 1170, 1543, 2396, 2181, 843, 1749, 350, 394, 1887, 691, 736, 54, 778, 1760, 2283, 962, 302, 1536, 55, 1120, 408, 2287, 193, 261, 745, 1127, 874, 993, 1690, 2419, 744, 2310, 2267, 1263, 989, 1909, 1116, 1890, 1388, 246, 1649, 618, 2223, 1155, 718, 1232, 777]. **LAPACK** [137]. **Large** [2043, 2163, 2303, 1561, 1740, 1808, 552, 1994, 1618, 902, 1906, 2082, 547, 954, 685, 144, 1360]. **large-scale** [1618, 1906, 2082, 685, 144]. **Larus** [1424]. **last** [2411, 172]. **Late** [1774]. **Latency** [1929, 2328, 2322, 1440, 780, 1237]. **latency-adaptive** [1237]. **Latency-Critical** [2322]. **later** [452, 829]. **Latte** [2402]. **Lattice** [2276, 528]. **Lattice-theoretic** [2276]. **lattices** [2401]. **law** [63]. **Laws** [396, 1615, 1518, 1091]. **l}ayer** [1242, 2165, 113]. **layered** [1662]. **Layers** [1879]. **Layout** [1100, 2142, 1343, 362, 1774]. **Layout-sensitive** [1100]. **layouts** [694]. **laziness** [1507, 2137]. **Lazy** [244, 133, 765, 987, 2396, 996, 2085]. **LDX** [2355]. **leadfoot** [2192]. **LeakChaser** [505]. **leaks** [1381, 227, 505]. **lean** [2182, 1040]. **learn** [1024]. **learned** [2391]. **learner**

[1135]. **Learning**
[2260, 359, 1943, 2170, 2279, 2135, 2073, 1138, 1438, 1113, 2404, 1023, 903, 2246, 2387, 2421]. **learnt** [2259]. **least** [1334]. **lecture** [171]. **legacy** [2080]. **Lem** [1736]. **length** [1238]. **lenses** [253, 386, 767, 2107]. **Less**
[799, 2329, 1937, 615, 1404]. **letrec** [1727]. **Level** [1861, 467, 953, 1056, 354, 2077, 174, 502, 568, 847, 1244, 1189, 854, 1025, 1126, 1674, 1595, 884, 2007, 1347, 761, 2210, 100, 97, 403, 1433, 1548, 1142, 12, 909, 989, 2119, 961, 474, 374, 1934, 1683, 1165]. **leveling** [468, 1978]. **Leveraging**
[123, 2342, 1872, 1687, 1314, 1685, 1776, 202]. **levitation** [236]. **lexical** [686]. **LHlf** [964]. **libdft** [913]. **LibDSL** [1909]. **libraries**
[1752, 116, 802, 1275, 1556, 1462, 2433, 493]. **Library** [1121, 1963, 159, 1419, 663, 1166, 719, 318, 1211, 2078, 423, 451, 828, 345, 1909, 592, 2215, 2088, 718]. **library-augmented** [1419]. **library-based** [663]. **life** [321]. **lifecycle** [1624]. **lifecycle-aware** [1624]. **lifeguards** [165]. **Lifeline** [578]. **Lifeline-based** [578]. **lifetime** [1409]. **LIFT** [1283]. **Lifting** [2342, 2435, 2018, 1633]. **light** [2111, 1986]. **Lightweight**
[2367, 2396, 1954, 2237, 1595, 2355, 1968, 422, 839, 2314, 601, 2022, 462, 1308, 1689, 1576, 2157, 750, 1328, 697, 1649, 694, 436, 813]. **Ligra** [1328]. **like** [588, 929, 874, 303, 353]. **likely** [1184]. **Lime** [281]. **limit** [1802]. **Limitations** [1279]. **limited** [2155]. **Limits** [1299, 2427, 1654]. **line** [2315, 191]. **Line-Up** [191]. **Linear**
[1131, 1834, 668, 1591, 1106, 1809, 156, 1370, 2086, 1521, 955, 239, 2218, 964]. **linear-constraint** [1106]. **linear-log** [668]. **Linearity** [632, 1862]. **linearizability** [191, 859, 1292, 1782]. **linearization** [1292]. **lines** [1283, 1158, 674, 2316, 1552, 1907, 787, 786, 2102, 784, 1906, 419, 1159]. **linguistic** [2185]. **linked** [527, 1559, 965]. **linked-lists** [965]. **Linking** [1966, 1789]. **Linux** [452, 829, 469]. **LIO** [1826]. **liquid** [858, 12]. **LiquidHaskell** [1820]. **Lisp2** [1455]. **list** [405, 633, 2210]. **list-homomorphism** [633]. **list-of-functors** [2210]. **list-processing** [405]. **lists** [531, 965]. **Lithe** [195]. **little** [1887]. **live** [1196, 1302, 2198, 1775, 912, 1306, 547, 548, 549, 1305]. **Lived** [2344]. **lively** [1898]. **liveness** [1382, 1811]. **Living** [2389]. **LL** [518, 1784]. **LLVM**
[1311, 1668, 2220, 507, 762, 1267, 344]. **Load** [130, 2089, 147, 578]. **Loads** [1969]. **Local** [1854, 979, 249, 1264, 703, 2149]. **locality** [2062, 154, 230, 1688, 1911, 1801, 667, 1035, 136, 2078, 1297, 81, 1201, 1075]. **locality-aware** [154, 81]. **locality-friendly** [1911]. **localization** [519, 2136, 1184, 1709]. **localize** [1446]. **located** [289]. **Lock**
[946, 576, 2375, 186, 1706, 1349, 153, 2152, 1340, 972, 118, 1702, 2120, 141, 1705, 142, 2094, 513, 964]. **Lock-Free** [2375, 576, 153, 2152, 972, 1702, 2120, 1705, 2094, 513, 964]. **locked** [478]. **Locking**
[1974, 653, 1714, 2060, 2096, 1584]. **locks** [139, 1330, 2077, 1776, 946, 1686]. **LOFAR** [132]. **log** [668, 1244, 429, 806]. **log-block** [1244]. **Logging**
[2350, 2347, 1707, 605, 430, 807, 1242]. **logic** [2230, 502, 1397, 746, 17, 730, 1, 1126, 304, 1517, 2252, 2233, 239, 991, 1641, 529, 753, 1046, 2392, 1991, 376, 1396, 1452, 1137]. **Logical** [898, 246, 1130, 1528, 1704, 609, 367, 732, 1720, 266, 638]. **logics** [248, 1516, 406]. **Logs** [2354, 503, 75]. **Lolliproc** [239]. **long** [441, 818]. **long-running** [441, 818]. **Look** [99, 1250, 255]. **Looking** [453, 830, 209]. **lookup** [998]. **lookup-table** [998]. **lookups** [1808]. **Loop**
[1153, 401, 2380, 2030, 2379, 1327, 1424, 969, 487, 460, 837, 160, 1039, 1695, 898, 1207, 292]. **Loop-aware** [1153]. **loop-free** [487]. **Loop-oriented** [2380]. **loops**
[2434, 1106, 896, 1521, 1593]. **losing** [2076]. **loss** [685]. **lost** [331]. **love** [332]. **Low**
[1233, 12, 2066, 2163, 1231, 468, 502, 446, 823, 619, 1126, 1243, 1296, 1637, 2386, 403,

496, 1326, 178, 572]. **low-cost** [468]. **low-fragmentation** [2163]. **Low-level** [12, 502, 1126, 403]. **Low-overhead** [2066, 1296, 572]. **low-power** [446, 823, 1637, 2386, 496]. **low-utility** [178]. **Lowering** [475]. **LRU** [705]. **LSM** [2094]. **Lua** [1888, 2284]. **LUCAS** [1237]. **lunch** [1768]. **Lustre** [843]. **Lutherie** [1372]. **LVars** [1500]. **LVish** [1597].

M3 [2332]. **Machine** [1926, 2056, 1294, 2049, 1943, 2073, 779, 34, 1087, 1656, 1249, 1301, 546, 1023, 903, 906, 2387, 2390, 544, 336, 403, 1698, 2186, 2037, 1649, 541, 213, 1314, 1305, 1795, 678, 2185]. **machine-independent** [403]. **Machine-verified** [1294]. **Machines** [1840, 1964, 1849, 2044, 1751, 537, 1434, 1304, 1996, 538, 910, 683, 1302, 1401, 1664, 684, 2194, 1580, 218, 2291, 147, 1306, 1672, 547, 240, 548, 144]. **macro** [86, 2306]. **macro-SIMDization** [86]. **macros** [257, 1891, 686]. **MacroSS** [86]. **made** [30, 206, 589]. **magic** [1517]. **Magnitude** [2329]. **Main** [2337, 1978, 446, 823, 95]. **Mainstream** [273]. **Maintaining** [1471, 83, 786]. **make** [615, 986]. **makes** [250]. **Making** [388, 627, 2010, 1523, 437, 814, 1825, 693, 2420]. **malloc** [2194]. **malware** [922]. **Managed** [2352, 1756, 1278, 211, 2165, 2377, 289]. **Managed-Language** [2352]. **Management** [1935, 2351, 1949, 2327, 2047, 2044, 1934, 1460, 1894, 1056, 2128, 395, 1457, 1204, 877, 384, 705, 1244, 1760, 1406, 494, 2165, 73, 1770, 702, 122, 21, 1771, 586, 769, 2377, 1178, 2197, 714, 1805, 713, 170, 2072, 212, 1075]. **manager** [1098, 1476, 905]. **Managing** [328, 536, 1177, 298, 443, 820]. **Manifest** [1846, 1847, 30]. **manifesting** [447, 824]. **Manipulating** [1843, 530, 19, 23]. **manipulation** [2411, 1635, 1641]. **manipulations** [2393]. **manual** [1320]. **Many** [1929, 1987, 1592, 1434, 1304, 1308, 1717, 708, 147, 1291, 1356, 196, 1075]. **Many-core** [1987, 1592, 1434, 1717, 708, 196, 1075]. **many-task** [1356]. **Manycore** [2334]. **Manycores** [2332, 845]. **Maple** [1042]. **mapped** [233, 2182]. **Mapping** [61, 844, 468, 2028, 456, 833, 923, 169, 98, 1710, 2387, 2185, 1248]. **MapReduce** [1944, 1803, 712, 2410]. **maps** [2120]. **mark** [1080, 1455]. **mark&sweep** [701]. **mark-compact** [1455]. **Market** [2321, 1659, 2258]. **Market-Based** [2321]. **market-driven** [1659]. **market-scale** [2258]. **markup** [182]. **marriage** [732]. **marshalling** [1007]. **MARTE** [57]. **Masses** [1832, 2317, 2311]. **Massive** [1813, 134]. **massively** [2424]. **massively-parallel** [2424]. **match** [2137]. **Matching** [253, 1743, 1282, 622, 2137, 2210, 404, 715, 2124, 1046, 1546, 1345, 935]. **mathematical** [623]. **mathematics** [623, 1101]. **Mathematizing** [361]. **MATLAB** [646, 1043, 1786, 1540, 495]. **matrices** [1693]. **matrix** [259, 2061, 1692, 127, 944, 1912, 1261, 522, 2068, 2030]. **matrix-vector** [127, 1261]. **matter** [1550, 135]. **matters** [658]. **mature** [80]. **Maximal** [2281, 1727, 1631, 1997]. **Maximizing** [2358]. **maximum** [584, 519, 56, 2232]. **may** [5]. **may-must** [5]. **MCA** [1248]. **MCAPI** [595, 470]. **me** [649]. **mean** [1701]. **meaning** [1385]. **measure** [2204]. **measured** [453, 830]. **measurement** [1553]. **measures** [2276]. **Measuring** [2292, 1768, 2057]. **mechanical** [1446]. **mechanised** [1486]. **Mechanism** [1837, 1954, 2099, 337, 572]. **mechanization** [750]. **Mechanized** [1988, 769]. **Mechanizing** [955]. **mechatronic** [425]. **Medusa** [952]. **meet** [2137, 1262]. **Meeting** [2384]. **Meets** [2373, 2114, 415, 1789]. **megabase** [129, 1713]. **Memento** [2199]. **Mementos** [441, 818]. **memif** [2346]. **memoization** [2172]. **Memories**

[2348, 1920, 437, 814, 175, 1278, 64]. **Memory** [1960, 2337, 1926, 1930, 1881, 2373, 1955, 2043, 2349, 2350, 2045, 2346, 1924, 1978, 2335, 702, 1922, 708, 2326, 226, 1938, 1848, 1919, 1918, 2330, 1075, 706, 711, 1894, 2163, 234, 1602, 2, 925, 2065, 123, 949, 560, 1659, 395, 1230, 598, 1353, 431, 808, 1776, 1666, 1661, 1303, 2382, 2152, 432, 809, 149, 1204, 1129, 446, 823, 1340, 1689, 299, 90, 576, 184, 1332, 91, 843, 1244, 219, 657, 1760, 1406, 2192, 1660, 64, 1312, 2165, 710, 2012, 98, 2191, 582, 498, 1322, 574, 96, 891, 146, 1076, 122, 118, 193, 1268, 1796, 1074, 1686, 287, 2150, 1188, 1453, 158]. **memory** [97, 2063, 1462, 1814, 2377, 89, 557, 587, 360, 508, 1083, 1328, 996, 433, 810, 2395, 2197, 1902, 1015, 714, 1991, 1619, 1805, 192, 1790, 314, 436, 813, 713, 1326, 842, 113, 556, 1242, 1458, 1709, 555, 1594, 284, 1321, 505, 170, 95, 1812, 545, 2005, 2066, 231, 1314, 935, 120]. **memory-aware** [97]. **Memory-Safe** [1926]. **Memoryful** [2278]. **MemSAT** [192]. **MemScale** [446, 823]. **mendler** [621]. **merge** [1324]. **merging** [871]. **meshes** [2068]. **Message** [2286, 727, 2153, 1067, 1076, 566, 1687, 2069, 781, 2185]. **message-passing** [2153, 1076, 781, 2185]. **messages** [1346]. **Meta** [1118, 761, 1861, 354, 2019, 1390, 1368, 1002, 2184, 303]. **meta-circular** [303]. **meta-compilation** [2184]. **Meta-level** [761, 354]. **meta-programming** [2019, 1368]. **meta-scheduler** [1002]. **Meta-theory** [1118, 1390]. **Metadata** [1952, 2338, 921]. **MetaFJig** [303]. **MetaHaskell** [1009]. **metal** [1928]. **metalanguage** [235]. **metalanguages** [799]. **metamodel** [2316]. **metaobject** [2032]. **MetaOCaml** [1914]. **metaprogramming** [174, 1397, 46, 304, 1009, 2032, 693, 1909]. **metaprograms** [426]. **metasketches** [2280]. **metatheory** [2169]. **method** [2264, 2283, 1065, 2082, 800, 651]. **methodology** [2256, 277, 936, 2432]. **methods** [1331, 1027, 1721, 427]. **Mezzo** [1377]. **mHealth** [1394]. **Micro** [81]. **Micro-pages** [81]. **microkernel** [206]. **microprocessors** [848]. **middleware** [1671]. **middleweight** [1520]. **migrate** [1304]. **Migrating** [2303, 459, 836]. **Migration** [2053, 1303, 2288, 1785, 1801, 1302, 318, 1347, 912, 478, 1306, 547, 548, 549, 1669, 1305]. **migrations** [1706, 792]. **Milner** [394, 1738]. **MinC** [2238]. **Miniapp** [977]. **Miniboxing** [1407]. **Minimal** [552, 1438, 359, 927]. **Minimal-overhead** [552]. **Minimization** [1522, 1246, 1689, 96, 1107]. **minimize** [1321]. **Minimizing** [1936]. **minimum** [942, 1781]. **Mining** [526, 1602, 1545, 915]. **Mint** [197]. **minute** [2168]. **minutes** [1283]. **MinX** [2238]. **Mio** [1476]. **misses** [2397, 1086]. **missing** [700]. **Mitigating** [1023, 1939]. **mitigation** [640, 863]. **MIX10** [1786]. **Mixed** [1857, 1673, 2063]. **Mixing** [200, 2126]. **mixture** [2028]. **ML** [235, 367, 1493, 1575, 991, 627, 601]. **MLF** [1575]. **Mnemosyne** [436, 813]. **Mobile** [2333, 1341, 1630, 1440, 2191, 107, 2398, 680]. **Mobl** [680]. **modal** [17, 1247]. **mode** [1666, 1243]. **Model** [1562, 1977, 425, 2230, 2367, 1844, 127, 1936, 2318, 791, 1848, 1519, 1010, 1561, 109, 520, 665, 156, 671, 1129, 2139, 1824, 2316, 91, 1247, 1135, 2259, 2276, 1338, 657, 1997, 2141, 958, 2012, 60, 960, 2084, 501, 1999, 604, 1350, 2035, 1719, 1652, 193, 2383, 1268, 2087, 1013, 956, 57, 181, 1484, 1897, 275, 587, 844, 2091, 794, 433, 810, 2093, 594, 1812, 1165]. **Model-based** [425, 1936, 109, 2316]. **Model-driven** [1562, 127, 791]. **model-learner** [1135]. **model-usage** [791]. **Modeling** [143, 1542, 903, 1811, 100, 158, 2062, 126, 410, 71, 595, 2090, 2247, 602, 326, 1136, 1172]. **Modelling** [2268, 1602, 614]. **Models** [2325, 2, 366, 2227, 1560, 797, 788, 1140, 498, 1322, 891, 2318, 2258, 1453, 1639, 411, 1160, 103, 192, 567, 2005]. **Modern**

[1938, 1893, 684, 713, 135]. **modes** [446, 823]. **modification** [2389]. **modifying** [512]. **Modular** [1878, 37, 1478, 1880, 1390, 377, 26, 635, 417, 2317, 1510, 304, 1292, 1022, 1391, 1653, 2210, 1506, 605, 695, 500, 1270, 425, 307, 1485, 2169, 102, 530, 751, 843, 378, 1311, 1903, 345, 403, 275, 422]. **modularity** [322]. **module** [354, 1050, 1059]. **modules** [696, 1903, 2105]. **modulo** [7, 1583, 2408, 1426, 2008, 1620, 1627]. **Mojim** [1918]. **Molecular** [1937, 2042]. **Molecular-Scale** [1937]. **Molecule** [1033]. **monad** [992, 1002, 2208, 716, 982, 1470, 721, 603, 1387, 1286, 1369]. **Monadic** [1287, 1475, 1033, 1390, 599, 600, 1388, 601, 2243, 1831]. **Monads** [40, 603, 1529, 2211, 715, 2217]. **Monitor** [292, 1274, 546]. **Monitoring** [2006, 797, 1945, 2354, 110, 1712, 84, 517, 475, 85, 513]. **Monitors** [2266, 2134]. **Monoids** [1882, 1468, 1096]. **monotonic** [1285, 62]. **monty** [1415]. **Moore** [63]. **mori** [2199]. **Morph** [1329]. **Mortar** [1660]. **most** [1223]. **Mostly** [307, 502]. **Mostly-automated** [502]. **Mother** [1874]. **motion** [490]. **moving** [618]. **MPI** [2079, 159, 959, 1719, 152, 2095, 596, 1682]. **MPI-based** [596]. **MPI-interoperable** [1682]. **MPI/SMPSs** [152]. **MPSoC** [104]. **MPSoCs** [1586, 97]. **MrCrypt** [1418]. **MRU** [705]. **MS** [2295]. **MSO** [1362]. **Mtac** [1369]. **much** [1074]. **Multi** [207, 1347, 637, 2083, 2128, 1241, 1423, 2077, 449, 826, 363, 1260, 1352, 90, 847, 2288, 576, 2312, 1332, 472, 2289, 154, 383, 67, 93, 923, 1025, 1901, 1674, 98, 2084, 41, 840, 1350, 1719, 2309, 288, 1188, 586, 134, 69, 2095, 478, 1031, 712, 2243, 714, 474, 108, 971, 197, 1273, 540, 1669, 1794]. **multi-accelerator** [2084]. **multi-bank** [98, 1188]. **multi-bulk-synchronous** [1352]. **multi-clocked** [472]. **multi-core** [1241, 90, 1332, 154, 840, 1719, 288, 1188, 478, 108, 971]. **multi-cores** [93, 712]. **multi-endpoint** [1719]. **multi-engine** [714]. **multi-GPU** [2083, 923]. **multi-language** [637, 2288, 2289]. **Multi-level** [1347, 2077, 847, 1025, 1674, 474]. **multi-monadic** [2243]. **multi-parameter** [41]. **multi-party** [2128]. **multi-path** [449, 826]. **multi-purpose** [67]. **multi-server** [586]. **Multi-stage** [207, 1260, 2309, 197]. **multi-staged** [363]. **multi-threaded** [1423, 383, 134, 69, 2095, 1031, 540]. **multi-threading** [1350, 1273]. **multi-tier** [1669]. **multi-version** [576]. **multi-versioning** [1794]. **multi-way** [2312, 1901]. **Multicore** [2375, 703, 901, 2321, 2322, 2163, 1341, 456, 833, 521, 470, 978, 459, 836, 702, 2387, 1031, 1178, 1183, 1476, 905, 1248, 76, 74]. **multicore-scalable** [2163]. **multicores** [568, 1993, 846, 1192, 169]. **multidimensional** [2397]. **Multilingual** [783]. **multiparty** [1123, 998]. **multiplayer** [146]. **Multiple** [740, 2345, 695, 1815, 2202, 1424, 327, 650, 585, 580, 1707, 362, 1713, 1985, 511, 228, 305]. **multiple-failure** [650]. **multiplication** [2061, 1912, 1261, 522]. **multiply** [127]. **multiprocessor** [1658, 70]. **multiprocessors** [92, 466, 105, 497]. **multirole** [391]. **MultiStar** [305]. **Multitasking** [1959]. **Multithreaded** [1880, 1778, 925, 68, 1441, 1779, 435, 812, 1357, 397, 160, 407, 2194, 1697, 1176, 148, 141, 85, 1042, 135]. **multithreading** [941, 1699]. **Multivariate** [385]. **Multiverse** [1433]. **MuscalietJS** [1662]. **Mushy** [2361]. **musical** [614]. **must** [5, 274]. **mutable** [1257, 464, 1183]. **mutation** [1140, 2159, 2233]. **mutator** [1460]. **mutators** [711]. **my** [347]. **Myrmics** [1076].

n [671, 1216]. **n-way** [671]. **Nameless** [628]. **Names** [1466, 2180, 2283, 255]. **NAND** [1244, 113]. **nanopass** [1392]. **nanoscale** [64]. **narrow** [481, 505]. **narrowing** [1285].

Native [2308, 660, 691, 1896, 309]. **Native-** [2308]. **Natural** [1791, 1641, 1272]. **navigating** [1790]. **NCAS** [592]. **NDetermin** [975]. **NDSeq** [516]. **near** [2062]. **near-complete** [2062]. **Nearly** [1925]. **needs** [1898]. **negative** [621]. **neglect** [332]. **neighbours** [1746]. **Neon** [212]. **nesC** [1574]. **nestable** [689]. **Nested** [1003, 746, 1931, 39, 1323, 1683, 1435]. **nesting** [123]. **NetBSD** [1823]. **NetCore** [1723]. **NetKAT** [1488, 2414, 1858, 2129]. **nets** [1750]. **Network** [1880, 2041, 1932, 625, 959, 1294, 2000, 2413, 745, 105, 2229, 134, 104]. **network-on-chip** [105]. **networked** [1574]. **networks** [1488, 1626, 1033, 1557, 2415, 744, 2402, 474]. **neural** [2402]. **neuromorphic** [440, 817]. **newcomer** [1734]. **newer** [1309]. **Newtonian** [2272]. **Next** [2372, 114, 1818, 2101, 437, 814, 2297]. **Next-Generation** [2372, 437, 814, 2297]. **NFA** [1139, 935]. **nightmares** [330]. **Nikola** [340]. **no** [373, 1808, 342, 1748]. **NoC** [1937]. **node** [144]. **Node.js** [2166]. **nodes** [1545]. **Noether** [1518]. **noisy** [2279]. **Nominal** [15, 759, 1102]. **Non** [2337, 2368, 2356, 1240, 1920, 1918, 1285, 1703, 1776, 437, 814, 1487, 62, 2027, 1710, 1292, 287, 937, 927, 1174, 618, 1739, 1321, 1812]. **non-blocking** [1703, 937]. **non-cache-coherent** [1812]. **non-coalesced** [1321]. **non-contiguous** [1710]. **non-determinism** [1487, 1174]. **Non-Deterministic** [2356]. **non-fixed** [1292]. **non-interfering** [1739]. **Non-intrusive** [1240]. **non-Java** [287]. **non-minimal** [927]. **non-monotonic** [1285, 62]. **non-moving** [618]. **Non-Preemptive** [2368]. **non-termination** [2027]. **Non-Volatile** [2337, 1920, 1918, 1776, 437, 814]. **nondeterminism** [400, 29, 1271, 1214, 1436]. **nondeterministic** [516, 975, 869, 2245]. **none** [856]. **Noninterference** [2110, 1402]. **nonstandard** [1531, 1136]. **NOrec** [121, 432, 809, 1922]. **normal** [2132]. **normalisation** [994]. **normalization** [2224]. **NoSQL** [1110]. **notation** [1171]. **nothing** [658]. **notions** [14]. **Novel** [2342, 218, 477]. **novice** [159]. **NP** [1683]. **Null** [698]. **NUMA** [1330, 2077, 1204, 946, 1964, 1697, 702, 2078, 2074]. **NUMA-aware** [1330, 2074]. **NumaGiC** [1964]. **number** [1469, 941, 1777]. **numbers** [2264, 183]. **numeric** [19]. **numerical** [659, 2174, 1911, 1896, 2010]. **nursery** [223]. **nursery-based** [223]. **NV** [437, 814]. **NV-Heaps** [437, 814]. **NVRAM** [2347]. **NVWAL** [2347].

O [1657, 1105, 1033, 896, 892, 2323, 1942, 343, 2041, 1802]. **Object** [1965, 1151, 1898, 2303, 1624, 1900, 2181, 704, 26, 235, 1904, 1916, 778, 2317, 1030, 1547, 189, 1413, 2198, 362, 769, 1773, 1897, 358, 697, 199, 2296, 1810, 352, 694, 289, 2092, 1409, 644, 2022, 2145, 777, 196, 931]. **Object-Bounded** [1965]. **object-constraint** [2181]. **Object-oriented** [1151, 2303, 1900, 26, 1916, 778, 189, 1413, 2198, 199, 352, 2092, 644, 2022, 196, 931]. **object-sensitive** [1624]. **object-sensitivity** [358]. **Objective** [1538]. **Objective-Smalltalk** [1538]. **Objects** [1883, 1535, 153, 437, 814, 995, 1149, 1282, 282, 2252, 1899, 296, 1414, 376]. **Oblivious** [1925, 1924, 1057, 65, 2076]. **observable** [907]. **observations** [1104, 269, 1734]. **OCaml** [623]. **Occurrence** [2408]. **occurrences** [621]. **OCTET** [1442]. **odd** [1101]. **Off** [2321, 1993, 1408, 1805]. **off-chip** [1993]. **off-the-shelf** [1805]. **offloaded** [953]. **offloading** [2083, 1077, 1028]. **offs** [2050]. **offside** [1143]. **oh** [347]. **OMG** [1562]. **On-Chip** [2320, 65]. **on-demand** [1039, 1028]. **on-stack** [1311]. **On-the-Fly** [1940, 1961, 1449, 1451, 457, 834, 1990, 1810]. **one** [665, 2125, 1672, 2069]. **one-sided**

[2069]. **ones** [2303]. **Online** [1443, 1331, 327, 2405, 70, 2298, 218, 85, 1331]. **Online-ABFT** [1331]. **only** [1323, 2151, 186]. **onto** [456, 833, 923, 844]. **OO** [282]. **OoOJava** [564]. **OOPSLA** [1230, 1571]. **Open** [2334, 1933, 1070, 1546]. **OpenACC** [2084]. **OpenACC-based** [2084]. **OpenCL** [2270, 585, 960, 2425, 2119, 2072]. **OpenMP** [951, 978, 930, 1719, 852, 1248]. **OpenMP-style** [978]. **OpenPiton** [2334]. **Operating** [1931, 2374, 473, 1196, 450, 827, 1195, 546, 1211, 1888, 1309, 172]. **Operation** [98, 414]. **Operational** [992, 851, 1487]. **operationally** [2268]. **operations** [598, 137, 896, 963, 527, 1559, 643, 1071]. **operators** [241, 1348]. **opportunities** [114, 2101, 708, 2172, 124]. **Opportunity** [2385, 1077]. **optical** [65]. **Optimal** [1509, 1608, 2143, 1317, 1344, 490, 850]. **optimality** [1385, 1501]. **optimisation** [2170, 2269]. **Optimisations** [1848, 755, 1268, 508]. **Optimising** [1366, 710]. **Optimistic** [1715, 1502]. **Optimization** [1912, 1948, 2091, 1024, 83, 463, 461, 481, 2262, 201, 843, 350, 1583, 1300, 494, 1310, 1301, 974, 1895, 106, 1023, 1527, 1343, 1581, 1585, 1245, 1769, 492, 973, 401, 292, 1604, 170]. **Optimizations** [223, 1153, 949, 1728, 2199, 963, 407, 1983, 2078, 115, 2418, 1443, 916, 165, 1427, 33, 283, 666, 1215, 1267, 1794]. **optimized** [1591, 1580, 1477]. **optimizers** [1024]. **Optimizing** [953, 1967, 2280, 1251, 1993, 1955, 208, 1401, 1540, 1142, 2182, 349, 1305, 2073, 2103, 568, 1915, 2294, 2184, 1994, 369, 1297, 1154, 1409, 155, 1792]. **optimum** [1284]. **Option** [1430]. **optional** [775]. **Oracle** [669, 511]. **ORAM** [1925]. **Orchestrating** [2311]. **Orchestration** [456, 833, 341, 484]. **Order** [1837, 1509, 396, 2114, 1384, 1728, 1478, 1363, 1612, 1450, 1101, 248, 1503, 616, 249, 17, 2123, 997, 1229, 504, 2235, 241, 564, 2266, 20, 1747, 2133, 308, 41, 501, 731, 1381, 1004, 2424, 1746, 1193, 2228, 991, 1013, 2116, 2023, 404, 2150, 1530, 645, 1484, 2267, 1506, 1286, 2085, 1045, 1396, 1108, 718, 1739, 1201, 2005]. **Ordered** [559, 1389]. **Ordering** [2335, 1704, 1023, 2378]. **Orders** [2329]. **oriented** [2303, 101, 1900, 2189, 1158, 2313, 26, 1916, 778, 1552, 682, 189, 1413, 2198, 2087, 1151, 57, 419, 2380, 199, 352, 53, 2092, 421, 644, 78, 2022, 196, 931]. **ornaments** [990]. **Orthogonal** [1882]. **Orthrus** [93]. **OS-level** [909, 1934]. **OSck** [450, 827]. **other** [1301]. **our** [43, 274, 1477]. **out-of-order** [564, 1193]. **Out-of-VM** [2051]. **outlier** [2178]. **output** [1138, 2003, 382]. **outs** [766]. **outsourced** [1313]. **over-approximated** [698]. **overcoming** [1157]. **Overcommitment** [2043]. **Overdriver** [555]. **Overflow** [1951, 1514, 513]. **Overhauling** [2270]. **overhead** [1231, 395, 2097, 552, 1296, 702, 2032, 475, 2160, 2066, 572]. **overlap** [152, 1691]. **overlapping** [1532, 270]. **overload** [555]. **overloading** [1828, 2117]. **oversubscribed** [555]. **Oversubscription** [2045]. **overview** [959, 952]. **OWL** [1205]. **own** [43, 2177]. **Ownership** [1332, 1155, 311, 312, 121, 38, 566, 1462, 2296].

P [1280]. **PACER** [185]. **package** [335, 1163]. **Packet** [2324, 1672]. **packing** [2241]. **Pacman** [1457]. **padding** [2397]. **Page** [1960, 2056, 2044, 1661, 1895]. **Page-Aware** [2056]. **Pages** [2043, 81]. **pain** [1640, 1472]. **Painless** [989, 628]. **Pair** [2357, 605]. **pairs** [1709]. **panel** [137, 1210]. **paper** [1223, 1904, 1907, 1902, 964]. **par-monad** [1002]. **paradigm** [283]. **paradise** [331]. **paradox** [189]. **Paragon** [1179]. **Parallel** [1815, 1963, 1334, 2351, 301, 1333, 1348, 2366, 1843, 1939, 669, 1336, 139, 1716, 951, 1056, 221, 123, 2061, 258, 940, 400, 488, 1339, 743, 1809, 665, 516, 979, 1341, 137, 563, 2067, 325, 194, 1586, 156, 2070, 2367,

1335, 864, 1511, 591, 966, 91, 84, 1342, 1617, 2098, 1720, 1080, 160, 670, 2090, 962, 654, 260, 1500, 1597, 941, 720, 1089, 2153, 1347, 1648, 2424, 342, 570, 115, 1618, 610, 942, 973, 1443, 956, 1690, 195, 482, 369, 2031, 134, 866, 1713, 222, 596, 1691, 1616, 592, 1598, 581, 1718, 225, 701, 85, 579, 594, 872, 1802]. **parallel** [2075, 852, 144]. **Parallelism** [1863, 1929, 1949, 2328, 484, 2062, 467, 560, 1003, 1323, 975, 562, 939, 2099, 377, 1813, 565, 1016, 559, 1444, 1189, 1058, 978, 571, 858, 1597, 117, 136, 884, 950, 721, 1152, 483, 167, 672, 2100, 1297, 900, 2076, 948, 781, 2216, 867, 1436, 961, 1800, 170, 1683, 1435]. **parallelism-aware** [950]. **Parallelization** [1708, 1961, 896, 957, 298, 1238, 588, 958, 146, 1383, 898, 69, 522, 310, 228, 168, 577, 652, 523, 151, 1299]. **Parallelizing** [873, 1694, 1306, 1175, 840, 430, 807, 931]. **Paralocks** [36]. **ParaLog** [85]. **parameter** [41]. **parameterization** [1117]. **Parameterized** [175, 751, 2428]. **parameters** [1549, 2150, 1258]. **Parametric** [234, 1515, 609, 1529, 695, 479, 1519, 1592, 608, 1725, 365, 517, 1407, 1284]. **Parametricity** [267, 1518]. **paramodulation** [981]. **Parasol** [1177]. **Paravirtual** [2323]. **Parcae** [866]. **PARD** [1927]. **Pareto** [850]. **Pareto-optimal** [850]. **parity** [619]. **PARRAY** [939]. **PARS** [2056]. **Parsec** [1830]. **parser** [262, 724, 1787, 2034, 518, 423]. **Parsing** [617, 1143, 1830, 2403, 1371, 882, 2033, 686, 55, 1784, 334]. **part** [1480, 298, 1854]. **Partial** [498, 2121, 2186, 1509, 1432, 395, 263, 1279, 1450, 2298, 2184, 2198, 1072, 878, 662, 2085, 2005]. **Partial-coherence** [498]. **partial-order** [1450, 2085]. **partiality** [992]. **partially** [2253, 657]. **partitioned** [96, 970, 1354]. **Partitioning** [1586, 2385, 1342, 480, 445, 822, 1245, 148, 1431, 2064]. **party** [2128, 297]. **pass** [405, 2378, 912]. **pass-through** [912]. **passing** [1332, 2153, 1076, 566, 1687, 368, 781, 2185]. **past** [2127]. **Patch** [550, 1742, 2246, 1183]. **Path** [1840, 2357, 524, 479, 1765, 2277, 449, 826, 1424, 219, 7, 1444, 165]. **Path-based** [524]. **path-dependent** [1765]. **pathnames** [2149]. **paths** [1510, 1404, 1291]. **patient** [2313]. **patient-oriented** [2313]. **Pattern** [2362, 1743, 397, 2208, 1135, 1282, 622, 2137, 404, 715, 1546]. **pattern-based** [397]. **pattern-matching** [2137, 404]. **Pattern-Recognition** [2362]. **Patterns** [1149, 2366, 323, 1150, 322, 1462, 2315, 2134, 673]. **pause** [2201, 1454]. **PCF** [1504, 632]. **PCM** [1243, 1978, 1919]. **PCM-based** [1978]. **PDP** [1926]. **PDP-11** [1926]. **Pearl** [1749, 1384, 1093, 1370, 268, 2212, 2131, 1372, 617, 633, 1738, 2102, 2125, 237, 1012, 1096]. **pearls** [605]. **Pebbles** [594]. **peephole** [1983, 2418]. **Peer** [2026]. **Peer-to-peer** [2026]. **PEMU** [2051]. **application** [918]. **C** [38, 768, 1121, 1268, 1410, 2150, 881]. **dynamic** [2095, 1180]. **faster** [1729]. **finish** [467]. **GPU** [960]. **makes** [1729]. **nesT** [1557]. **Operating-System** [2332]. **Pull** [1999]. **regular** [2063]. **Replay** [2052]. **semantic** [1857]. **SMPSs** [152]. **software** [1186, 556]. **SW** [1587, 1232]. **SW-synthesis** [1634]. **Web** [1844]. **wrapper** [1729]. **perceptions** [243]. **Perfctr** [539]. **Perfctr-Xen** [539]. **Performance** [319, 2065, 979, 2373, 538, 1955, 2043, 1310, 2324, 2348, 1936, 2172, 2042, 2358, 2403, 1646, 2293, 1562, 1465, 1181, 126, 925, 1685, 932, 1762, 2077, 150, 1239, 1191, 1308, 1260, 1606, 568, 90, 453, 830, 959, 2289, 219, 460, 837, 157, 917, 2427, 1216, 861, 1205, 649, 710, 962, 202, 1658, 546, 106, 1786, 1593, 1243, 1697, 118, 1193, 2018, 2087, 539, 956, 1556, 2016, 993, 1315, 100, 1208, 158, 1754, 1696, 132, 1031, 2314, 1553, 924, 1783, 2119, 335, 1558, 1805, 1476, 1326, 2088, 685, 1320, 144, 135]. **performance-guided** [1754]. **permission** [736, 1599]. **permissions** [772, 1377]. **permits** [2269]. **Persistence** [1976, 477].

Persistent [2350, 2348, 1643, 437, 814, 436, 813]. **Personal** [1838, 1933, 1636]. **perspective** [2118, 904, 1636]. **perspectives** [243]. **Pervasive** [2338, 58, 315, 51, 278]. **pessimistic** [689]. **peta** [1316]. **peta-scalable** [1316]. **Petascale** [1680]. **PHALANX** [225]. **PHANTOM** [144]. **Phase** [1919, 847, 1310, 2090, 106, 1023, 1571, 2378, 1314]. **phase-ordering** [1023]. **Phosphor** [1757]. **Photonic** [1937]. **PHP** [776, 217, 1047]. **Physical** [1917, 2191, 324]. **physically** [60]. **Pick** [358]. **pickler** [1413]. **pickles** [1413]. **PIFT** [2370]. **Pilot** [159]. **Pilsner** [2116]. **Pin** [2051, 1916]. **pinning** [2195]. **Pinocchio** [321]. **Pintools** [1916]. **Pipeline** [1967]. **Pipelines** [1948, 194, 1297, 1723]. **pipelining** [1236, 8]. **pitfalls** [1026]. **PL** [2313]. **place** [1692, 1693]. **Placement** [1960, 233, 161, 1204, 1133, 2080, 1245, 81]. **Places** [781]. **Plaid** [681]. **Plan** [1129]. **planners** [1901]. **planning** [1451, 2031]. **Platform** [1971, 1168, 1051, 2308, 449, 826, 1052, 1554, 97, 104, 1667]. **platform-based** [1168]. **Platform-Specific** [1971]. **Platforms** [2046, 221, 1592, 2086, 941, 1209, 1152, 844, 905]. **play** [268]. **Playing** [748]. **PLDI** [1572, 1228]. **pleasure** [1472]. **plug** [418]. **plug-in** [418]. **plugin** [1087, 2204]. **PLUTO** [2062]. **Pocket** [442, 819]. **point** [2264, 1449, 1146, 893, 1679, 631, 2173, 2393, 183, 1981, 322, 411, 1604]. **pointcuts** [47]. **pointer** [2171, 2012, 1461, 2287, 2380, 1643]. **Points** [357, 2168, 1289, 1487, 1292, 2401, 301, 933, 1085, 1807, 47, 1417]. **Points-to** [357, 2168, 1289, 301, 933, 1085, 1807, 1417]. **Pol** [1168]. **polarised** [2227]. **Policies** [1836, 1884, 1056, 38, 1723, 734, 1075]. **policy** [684, 511]. **PolyCheck** [2263]. **Polyhedra** [897, 1141]. **polyhedral** [958, 1262, 1695, 1141, 1318]. **PolyMage** [1948]. **Polymorphic** [1480, 1854, 2390, 1538, 777, 1466, 241, 260, 1819, 2423, 1608, 2190]. **polymorphism** [2292, 695, 608, 1400, 2123, 609, 1607, 1407, 2117]. **polynomial** [758]. **Polyvalent** [1943]. **Polyvariant** [241]. **pooling** [548]. **POP** [2313]. **POP-PL** [2313]. **POPL** [1231, 1226, 1570]. **portability** [2087]. **Portable** [962, 1208, 1248, 1682, 853, 458, 835, 929, 2078, 1463, 2119, 579, 108]. **Position** [1925]. **Position-based** [1925]. **positive** [276, 641]. **POSIX** [2149]. **Post** [2361]. **Post-ISA** [2361]. **poster** [964]. **potential** [705, 886, 1310, 924]. **Power** [1937, 82, 1178, 1934, 2358, 83, 756, 446, 823, 453, 830, 5, 444, 821, 1117, 65, 1575, 1243, 445, 822, 1784, 1637, 2386, 496, 443, 820, 768, 497, 881, 1209]. **power-aware** [444, 821]. **power-efficient** [65]. **powered** [1177]. **PP** [591]. **PP-CC** [591]. **Practical** [1728, 987, 1704, 1238, 1207, 2136, 2217, 1970, 392, 2044, 2127, 2061, 1371, 140, 1398, 1279, 1893, 913, 1018, 627, 1735, 2130, 1705, 50]. **practice** [1767, 477, 1134, 1506]. **Practices** [1572]. **pragmatic** [422]. **Pragmatics** [793]. **pre** [698, 1644, 326, 1417]. **pre-analysis** [1644]. **pre-conditions** [698]. **pre-processing** [1417]. **pre-requirements** [326]. **Precise** [479, 530, 371, 1461, 2430, 1624, 1601, 1276, 661, 1617, 875, 640, 899, 1217, 900, 1463, 872]. **precise-restartable** [1617]. **Precision** [1976, 300, 1603, 1604]. **precondition** [2391]. **PREDATOR** [1676]. **Predicate** [2059, 383, 501, 1019, 307, 1274]. **predicates** [2230, 1900, 388, 330]. **predict** [850]. **Predictable** [478]. **Predicting** [1841, 144]. **Prediction** [2328, 145, 847, 956, 228, 1063, 1793]. **Predictive** [2370, 1631, 2247, 1676, 758]. **Preemptable** [1315]. **Preemption** [1959, 1582]. **Preemptive** [2368, 635, 573]. **PREFAIL** [650]. **preferred** [849]. **prefetch** [1202]. **prefetcher** [87]. **prefetching** [149, 459, 836, 655]. **prefix** [1511, 1334, 2424]. **preprocessor**

[882, 1551, 786, 1550, 412].
preprocessor-based [1551, 786, 412].
prescription [2313]. **Presence**
[1839, 2379, 2155, 896, 686, 168, 2162].
Presentation [726, 623]. **presenting** [623].
preserve [1898]. **preserving**
[637, 1163, 520, 198, 499, 1215]. **pressure**
[1768]. **Prettier** [722]. **pretty** [334].
Preventing [2007]. **previous** [1898]. **price**
[665, 1994]. **primitive** [1995, 1215].
Principal [2254, 1855]. **principle** [631].
Principled [1143, 1961, 1456, 2127].
Principles
[1226, 1134, 1120, 42, 630, 989, 352].
Printing [2264, 183, 334]. **priority**
[2058, 972, 1245, 901, 364, 1351, 1711, 2094].
priority-based [901]. **prison** [639].
Privacy [1837, 1838, 735, 1131, 250, 734].
private [1336, 223, 902]. **privatization**
[1057, 885]. **Privilege** [1931]. **Proactive**
[2363]. **Proactively** [2043]. **Probabilistic**
[735, 1494, 500, 1504, 71, 1871, 1872, 1936,
1610, 2244, 77, 2248, 1503, 94, 1134, 1505,
2259, 1611, 2001, 2258, 1609, 2267, 1291,
2217, 1793]. **Probability** [2164, 771].
probes [2389]. **problem** [2, 1106, 2109,
1342, 188, 1023, 381, 2124, 61, 1387].
problem-space [61]. **problematic** [1067].
problems [1449, 893, 2248, 56, 1783, 2172].
procedural [531]. **Procedure**
[1858, 530, 2008]. **procedures**
[989, 18, 1362]. **Process** [104, 1033, 1571].
processes [399]. **Processing** [1952, 2324,
1948, 405, 1066, 1247, 382, 1787, 1297, 2082,
2091, 1328, 1417, 1136, 1810, 2088, 952, 895].
Processor
[1954, 1590, 71, 1236, 79, 111, 433, 810].
Processors [2362, 925, 1352, 583, 459, 836,
840, 2387, 1325, 495, 1075, 74].
Procrastination [2326, 1079].
Procrastination-Based [2326]. **producer**
[1989, 1103]. **producer-consumer** [1989].
producing [991]. **Product**
[674, 1283, 1158, 2316, 1555, 1552, 1907, 787,
2272, 786, 784, 1906, 419, 243, 2315, 1159].
product-based [1555]. **Production**
[1181, 2067, 1463]. **Production-run** [1181].
Productive [1379, 962]. **productiveness**
[481]. **Productivity** [2361, 1378, 1440].
products [785]. **Professional** [1224, 1568].
Profile [2019, 846, 848, 490].
Profile-guided [2019, 846]. **profiler** [1768].
profilers [179]. **Profiling** [1507, 1064, 862,
1424, 538, 2294, 218, 567, 1409, 860, 2162].
Program
[2101, 265, 1239, 1880, 1885, 1852, 7, 1038,
2423, 1841, 1570, 2371, 1066, 1449, 1169, 893,
1779, 1445, 1457, 1725, 1397, 2169, 2097, 110,
1721, 730, 5, 1583, 1755, 2427, 24, 1254, 2009,
41, 2159, 894, 764, 2252, 1022, 1554, 510,
189, 1240, 2170, 2039, 2144, 2272, 1291, 1489,
2010, 2410, 27, 524, 1071, 638, 283, 666,
1452, 44, 1063, 151, 1622, 762, 1794, 763].
program-assisted [1457].
program-specific [2427].
programmability [977]. **Programmable**
[1927, 2400, 650, 167, 744, 87].
Programmatic [2411]. **Programmer**
[2361, 1440]. **programmers**
[1818, 159, 803, 1024, 505]. **Programming**
[1349, 1958, 951, 2362, 560, 29, 1373, 1870,
760, 2367, 1844, 2345, 2140, 558, 1975, 2346,
2221, 1377, 744, 1263, 1860, 324, 1862, 1947,
273, 612, 2319, 1104, 1088, 139, 1465, 328, 180,
473, 1542, 2244, 1762, 2164, 2019, 316, 1259,
2308, 2226, 1123, 58, 1508, 156, 1557, 1740,
1397, 671, 2189, 256, 1681, 1288, 1996, 664,
1280, 1368, 591, 1772, 1097, 1824, 2181, 626,
2313, 625, 1332, 26, 1134, 1505, 1281, 1887,
680, 778, 1615, 657, 1760, 458, 835, 1382, 654,
960, 2084, 2305, 1120, 731, 1381, 1500, 929,
279, 1472, 1403, 2304, 682, 2035, 1719, 375].
programming
[1694, 193, 2107, 2413, 2198, 602, 745, 251,
610, 270, 2087, 1361, 1151, 627, 988, 857,
1690, 1348, 351, 1394, 255, 482, 645, 181, 1548,
1696, 119, 844, 783, 2217, 243, 989, 2115, 1252,
2020, 1164, 1726, 1116, 1599, 601, 624, 1098,

2076, 2285, 980, 1763, 2093, 53, 2223, 197, 718, 594, 1980, 1356, 421, 1369, 1475, 1000]. **Programs** [1877, 1855, 1836, 1945, 2363, 1843, 2292, 1336, 1716, 319, 405, 2114, 1384, 1626, 2263, 1764, 1441, 1779, 1478, 531, 743, 435, 812, 1357, 869, 1405, 1625, 865, 1482, 2067, 150, 1586, 636, 2248, 6, 1523, 611, 502, 363, 2024, 462, 1271, 2431, 1503, 1791, 530, 371, 1125, 2381, 997, 1700, 397, 1984, 456, 833, 846, 1087, 2205, 751, 2312, 472, 487, 383, 1617, 7, 1057, 1997, 1611, 1086, 670, 20, 308, 2008, 162, 790, 1697, 2176, 2153, 1176, 19, 38, 1366, 2080, 1049, 1994, 115, 1072, 2228, 23, 56, 2023, 973, 2001, 404, 1019, 1354, 1014, 495, 369]. **programs** [1036, 2031, 1411, 2279, 2029, 163, 1142, 1291, 1604, 1199, 364, 1988, 508, 1083, 1989, 596, 996, 1616, 1598, 1286, 1108, 314, 569, 872, 1802, 1409, 155, 1042, 852, 1318, 135, 572, 120, 931]. **programs*** [1734]. **progress** [2276, 1618, 2066]. **project** [269]. **Projectional** [1905]. **projections** [2036]. **Prolog** [714]. **Promoting** [1827]. **Promotion** [1923, 2179]. **Prone** [1939, 1235]. **Proof** [1886, 1863, 1516, 991, 1528, 2118, 1495, 1101, 615, 889, 1117, 1517, 381, 749, 1098]. **Proof-producing** [991]. **proof-relevant** [1528]. **Proofs** [1491, 598, 1482, 2024, 1791, 1577, 748, 737, 1641, 1272, 1642, 33, 1012]. **propagation** [481, 2317]. **Properties** [1840, 1841, 869, 2277, 2167, 653, 517, 1291, 1427, 2392, 1116]. **prophecies** [388]. **proportional** [185]. **proposal** [1825]. **propositional** [1516, 1510]. **Propositions** [1006]. **protected** [920]. **Protecting** [1930, 1954, 921, 111]. **Protection** [2372, 2336, 93, 848, 1233, 313]. **ProteusTM** [2373]. **proto** [330]. **proto-scientific** [330]. **Protocol** [2153, 37, 998, 2195, 364]. **Protocol-based** [2153]. **protocols** [1358, 131, 1317, 2032, 1790, 1277]. **Provably** [1716, 1983]. **prover** [761, 1119, 529, 981]. **Proving** [869, 631, 2206]. **Provisioning** [2353, 542, 82]. **Proxies** [352, 1537, 1898]. **proxy** [977]. **Prudent** [2326]. **prune** [481]. **pruning** [532, 401]. **pseudorandom** [1469, 1777]. **PSync** [2253]. **PuDianNao** [1943]. **pull** [1807]. **puppet** [2416]. **Pure** [25, 331, 994]. **purely** [611, 2103, 722, 1366, 2120]. **purely-functional** [2120]. **purity** [1065]. **purpose** [67, 1029, 2305, 2130]. **pursuit** [2385]. **Push** [1807, 1999]. **Push-pull** [1807]. **Push/Pull** [1999]. **Pushdown** [2274, 606, 997, 2235]. **pushing** [1802]. **Pushouts** [1167]. **Pycket** [2104]. **PyPy** [1153]. **Python** [2292, 1415, 269, 1892].

Q [1347]. **QoS** [2368, 1179, 586, 1180, 2322]. **QoS-aware** [1179]. **qualitative** [2248]. **Quality** [2364, 1945]. **quantification** [1610]. **quantifiers** [2428]. **quantile** [1190]. **Quantitative** [1111, 1875, 1128, 1405, 2248, 1495, 14, 20, 1530]. **Quantum** [1949, 1862, 399, 1281, 1530]. **quasi** [1500]. **quasi-deterministic** [1500]. **queries** [2161, 492, 1651]. **Query** [2232, 1398, 1251, 2167, 2318]. **query-** [2167]. **Query-guided** [2232]. **querying** [1389, 2318]. **questions** [279]. **queue** [2058, 972, 2094]. **queues** [1992, 580, 1325]. **quick** [2212]. **QuickCheck** [462]. **quickening** [348]. **quickly** [1402, 183]. **Quipper** [1281]. **quotient** [2225].

R [978, 1663, 1895, 1665, 2160]. **Race** [1700, 1630, 1629, 876, 2330, 2156, 1628, 1041, 1631, 2192, 642, 313, 2080, 1354, 1411, 758, 1175]. **RACECAR** [971]. **RaceFree** [1350]. **races** [185, 597, 184, 921, 1598, 572]. **Racket** [1544, 783, 781, 1541]. **racy** [1998]. **raising** [1575]. **RAIVE** [2173]. **RALA** [1]. **RAM** [1925, 849]. **ramifications** [1144]. **Random** [308, 462, 941, 1393]. **random-number** [941]. **Randomized** [763, 77]. **randomness** [1188]. **ranged** [1044]. **rank** [1400, 1694].

ranked [241]. **ranking** [1106, 2038]. **rapid** [2389, 2362]. **rapid-toggling** [2389]. **Rate** [1764]. **raw** [1429]. **rays** [203]. **RCDC** [434, 811]. **RCU** [2059]. **RDMA** [2041]. **RDMA-capable** [2041]. **re** [841]. **re-scheduling** [841]. **Reachability** [1876, 1276, 188, 2231, 2008, 381, 1046, 1290]. **reachability-bound** [188]. **reachability-modulo-theories** [2008]. **Reactive** [664, 1836, 1508, 1288, 1772, 2312, 1382, 731, 1381, 2222, 2207, 1642, 1180, 1475]. **read** [2080, 2198, 186, 1079, 1991]. **read-copy-update** [1991]. **read-only** [186]. **reader** [1330]. **reader-writer** [1330]. **readers** [1340]. **readers-writer** [1340]. **ready** [2100]. **reagent** [269]. **Reagents** [868]. **Real** [1972, 1656, 1970, 856, 1231, 1815, 1357, 1984, 1247, 841, 861, 710, 215, 1736, 66, 902, 176, 57, 222, 1783, 1820, 465, 1409]. **Real-Time** [1972, 1970, 1656, 856, 1231, 1815, 1247, 841, 710, 215, 176, 57, 222, 465]. **real-world** [1984, 861, 1736, 1783, 1409]. **realistic** [853]. **Reality** [2361]. **realizability** [742]. **realizing** [1683]. **reals** [1497]. **reasonable** [1459, 1069, 2092]. **Reasoning** [1271, 2205, 2251, 1872, 1882, 2149, 1160, 305, 735, 1478, 1373, 1511, 1395, 371, 1125, 377, 249, 2006, 751, 600, 1135, 1510, 1396, 573]. **Reassignment** [2321]. **rebooting** [521]. **ReBudget** [2321]. **ReCaml** [238]. **receipt** [727]. **Reclamation** [2326, 2152]. **Recognition** [2362, 2386]. **recommendations** [1053]. **recomputation** [1297]. **Reconciling** [1282, 1657]. **Reconfigurable** [1, 856, 1815, 480]. **reconfigurations** [238]. **reconfigured** [242]. **reconsidered** [1078]. **Reconsidering** [1230]. **reconstructed** [514]. **Reconstruction** [1854, 2290]. **Record** [2052, 174, 1189, 2157]. **record-and-replay** [2157]. **record-replay** [1189]. **Record/Replay** [2052]. **recording** [1264, 1986]. **records** [121, 1608]. **recoverability** [2231]. **recovery** [668, 1234, 593, 1307, 546, 1621, 1017, 1898, 577, 1182]. **rectangular** [1693]. **rectified** [2179]. **recurrences** [2379]. **Recursion** [1925, 1874, 630, 1378, 621, 1379, 2112, 620, 1389, 1380, 41, 2278]. **Recursive** [1840, 737, 366, 298, 696, 667, 1426, 2029, 2238, 2076]. **recursively** [743]. **recycle** [471]. **Recycling** [2200]. **redirecting** [1298]. **Reduce** [2328, 2097, 1188, 2377, 2160]. **Reduced** [1922, 323]. **Reduceron** [242]. **reduces** [1455]. **reducible** [503]. **Reducing** [2201, 1929, 2231, 1020, 1351, 685, 2098, 80]. **reduction** [1509, 926, 1450, 1040, 1997, 1821, 883, 989, 2085, 1242, 1802, 2005, 1588]. **reductions** [1791, 885]. **redundant** [2138, 2425]. **REEact** [905]. **Refactoring** [1767, 318, 1422, 1028, 1027, 647, 1421, 1785, 60]. **refactorings** [293]. **Reference** [2357, 1810, 1016, 1065, 1081, 1408]. **references** [1257, 318, 368]. **Refinement** [1837, 1883, 1833, 1744, 2409, 1111, 2006, 1257, 2259, 383, 1600, 1534, 532, 2423, 1484, 1396, 1820, 2106, 1622, 2135]. **refinements** [746]. **refining** [376]. **Reflection** [795, 1831, 2032, 2296, 321]. **reflective** [1914, 46, 426]. **refresh** [445, 822]. **refresh-power** [445, 822]. **refunctionalization** [2124]. **refutations** [1276]. **regained** [331]. **Region** [1760, 1957, 1187, 2151, 1300, 840, 1579, 314, 1215, 1299]. **Region-based** [1760, 840, 1579, 1299]. **regional** [780]. **regions** [48, 63, 1041, 2432]. **register** [841, 380, 908]. **register-based** [908]. **Registration** [320]. **Registration-based** [320]. **regression** [2244, 1190]. **Regular** [1842, 387, 260, 268, 1362, 1345, 935]. **Regularities** [1188]. **Rehearsal** [2416]. **ReHype** [543]. **reifiable** [2210]. **reification** [47, 1388]. **Reified** [1549]. **Reim** [1065]. **ReImInfer** [1065]. **related** [1582, 2301, 2395, 305]. **relation**

[1249, 367, 638, 2085]. **Relational** [1837, 1352, 2002, 735, 1327, 1494, 249, 17, 2142, 1747, 21]. **relationally** [1519]. **relations** [1528, 732, 295, 2207, 1130]. **relationship** [782]. **Relatively** [2023, 1108]. **relaxation** [1128]. **Relaxed** [1881, 360, 1452, 2058, 869, 434, 811, 498, 891, 2269, 1800, 2094, 2005]. **Relaxed-memory** [360]. **Relaxing** [1990]. **release** [2271]. **release-acquire** [2271]. **relevant** [1528]. **reliability** [1405, 94, 1769, 105, 439, 816]. **reliability-** [1769]. **Reliable** [1919, 1918, 64, 1822, 800]. **Relocation** [2371]. **Rely** [1257, 764]. **Rely-guarantee** [1257]. **rely-guarantee-based** [764]. **relying** [1086]. **remedies** [2079]. **Remix** [2405]. **remorse** [1831]. **Remote** [2052, 2323, 1923, 2179, 953, 2208, 655]. **Remote-Scope** [1923, 2179]. **Removal** [2374, 1049]. **removing** [1539]. **rename** [1421]. **renewable** [1177]. **reordering** [1605]. **reorganizing** [1321]. **repair** [2405, 1022, 1621, 1199, 1598]. **repeatability** [1665]. **repeatable** [853]. **Repetitive** [1832]. **Replacement** [920, 1311]. **replacing** [986]. **replay** [1335, 207, 1189, 2157, 1040, 70, 503, 1707, 1986, 430, 807, 1183, 474]. **replay-supported** [1040]. **Replicated** [1501, 64]. **Replication** [2056, 1502, 2425, 229]. **replication-based** [229]. **report** [1221, 1565, 1818, 779, 256, 1001, 1573, 1220, 1564, 1225, 1224, 1222, 1566, 614, 339, 1819, 1394, 1011, 269, 1570, 1393, 1098, 1219, 1563, 1569, 1568]. **Representation** [1868, 1865, 2342, 939, 248, 485, 890, 778, 1903, 1774, 2183, 762]. **representations** [1345]. **representing** [1094]. **reproduce** [1264]. **reproducibility** [1665]. **reproducible** [147]. **reproducing** [1265]. **reproduction** [1040, 1678, 76]. **ReQoS** [1180]. **Request** [72]. **requirements** [234, 2384, 326]. **REScala** [1772]. **Research** [2334, 1210, 1569, 677, 779, 409, 1225, 1498, 750, 1474, 1819, 326, 1701, 1665, 2223]. **Resilience** [112, 1968]. **Resilient** [1681]. **resistive** [64]. **Resolving** [189]. **Resource** [752, 2353, 2046, 2055, 2047, 2321, 1056, 473, 2155, 2025, 1313, 384, 707, 385, 20, 416, 769, 323, 1015, 1538, 74]. **resource-based** [707]. **resource-constrained** [416]. **Resource-Efficient** [2353]. **Resource-sensitive** [752]. **Resourceable** [403]. **resources** [2308, 2227, 548]. **Resourcing** [1927]. **Resourcing-on-Demand** [1927]. **Respec** [70]. **response** [83]. **responsive** [444, 821]. **responsiveness** [2399, 1754]. **restart** [1438]. **restartable** [1617]. **RESTful** [932]. **restore** [545]. **Resugaring** [1633, 2108]. **Results** [1945, 269]. **Resurrector** [1409]. **retargetable** [1668, 403]. **Retargeting** [1971]. **Rethink** [541]. **Rethinking** [264, 451, 828, 838, 521, 1662]. **retrofitted** [217]. **retrofitting** [1481, 1533]. **return** [1670]. **Reusable** [44, 2169, 1547, 1736, 345, 1073]. **reuse** [949, 1561, 407, 439, 816, 1164, 1605, 113]. **reuse-aware** [113]. **Reusing** [1068]. **revealing** [1831]. **reverse** [1347]. **review** [1571]. **revisions** [316, 2316, 722]. **revisited** [560, 897, 710]. **Revisiting** [947, 1695, 1143]. **revolution** [570]. **revolutions** [453, 830]. **reward** [1169]. **ReWire** [1979]. **rewrite** [2119]. **rewriter** [1255]. **rewriting** [2138, 557]. **Reynolds** [1499]. **RFID** [441, 818]. **RFID-scale** [441, 818]. **Ribbons** [657]. **rich** [1760]. **Richard** [726]. **RID** [2357]. **Rider** [1971]. **rigor** [1665]. **Rigorous** [1459]. **Ring** [1942, 1081]. **rIOMMU** [1942]. **rise** [1185]. **risk** [2177]. **River** [1444]. **RMWs** [1256]. **RNFTL** [113]. **Robin** [394]. **Robotic** [1975]. **robotics** [791]. **Robust** [1150, 1554, 352]. **robustness** [2384]. **RockSalt** [888]. **role** [1241, 36]. **role-based** [36]. **RoleCast** [700]. **rollback** [605]. **Romeo** [1726]. **roofline**

[956]. **round** [282]. **routing** [65, 279, 82]. **row** [1188, 1608]. **row-polymorphic** [1608]. **Rowhammer** [2372]. **RPC** [1194]. **RRB** [2130]. **Rubah** [1758]. **Rubber** [330]. **Ruby** [1686, 1890, 393]. **rule** [1143, 1200]. **rule-directed** [1200]. **rules** [1590, 1200, 2187, 889, 2138, 302, 2119]. **Run** [750, 1181, 623, 745, 416, 796, 791, 1069, 133, 687, 75]. **run-time** [623, 745, 416, 796, 791, 1069, 133, 687, 75]. **running** [441, 818, 1541]. **runs** [1893]. **Runtime** [2171, 1353, 1954, 2352, 1836, 1965, 2321, 1934, 2079, 68, 516, 1606, 2028, 1278, 211, 2289, 67, 1912, 2173, 1621, 1719, 2220, 288, 216, 422, 310, 210, 2402, 2093, 52]. **runtimes** [1756, 2202, 1662, 289].

S [932]. **S2E** [449, 826]. **Safe** [400, 1737, 1926, 1196, 654, 62, 1922, 167, 1845, 2054, 508, 1017, 2197, 687, 172, 2206, 437, 814, 1419, 1280, 1824, 1016, 54, 1338, 571, 415, 2220, 787, 2300, 496, 1726, 1015, 289, 2407, 1099]. **safely** [1990]. **Safer** [2304, 2035]. **Safety** [1453, 109, 598, 2286, 224, 2429, 899, 2392, 1634]. **safety-critical** [1634]. **Safety-first** [1453]. **samples** [892]. **Sampling** [110, 1066, 290, 475, 850]. **Sampling-based** [110, 475]. **sandboxing** [512]. **sanitizers** [1133]. **SAS2013** [1573]. **SAT** [2139]. **SAT-directed** [2139]. **SATCheck** [2139]. **satisfaction** [1490]. **satisfiability** [7, 519, 1761, 2232]. **satisfiability-based** [1761]. **save** [1127]. **saving** [642, 445, 822]. **SC-preserving** [499]. **Scala** [1083, 659, 417, 796, 1556, 678, 1083, 2190, 2306]. **scalability** [1423, 1192, 1994]. **Scalable** [2156, 1335, 1355, 966, 1850, 1255, 286, 131, 923, 1080, 2344, 1922, 934, 942, 343, 1354, 900, 2068, 673, 2163, 2058, 2059, 500, 365, 565, 576, 2060, 1281, 154, 845, 1461, 146, 1822, 2383, 561, 2120, 1217, 579, 1356, 1316]. **ScalaExtrap** [569]. **Scalaness** [1557]. **Scalaness/nesT** [1557]. **Scale** [2368, 1933, 1937, 1932, 1561, 2168, 552, 2176, 906, 1618, 2258, 441, 818, 1906, 2082, 1180, 954, 124, 685, 144]. **scales** [1360]. **Scaling** [137, 1962, 532, 2341, 2229, 1044, 453, 830]. **scan** [1337]. **scanning** [897, 704, 1455]. **scapegoating** [373]. **SCCharts** [1634]. **SCCMulti** [1718]. **schedule** [1592, 466, 2036, 1333, 1677, 872]. **scheduler** [77, 1002, 154, 1057, 214, 948, 133]. **scheduler-oblivious** [1057]. **schedulers** [1296, 901, 454, 831]. **schedules** [1441]. **Scheduling** [1336, 122, 465, 669, 1716, 536, 1246, 2426, 1179, 389, 1700, 71, 1002, 841, 480, 1205, 73, 1203, 2252, 1295, 1237, 1698, 88, 1141, 1359, 1711, 74]. **schema** [1505]. **schema-driven** [1505]. **schemata** [330]. **scheme** [1331, 107]. **Schemes** [1855, 1874, 1380, 41]. **SCHISM** [176]. **school** [1375]. **science** [329, 332, 1375, 1185, 272]. **scientific** [1712, 330, 954]. **Scope** [1923, 2179, 1816]. **scopes** [2275]. **Scott** [1102]. **Scrap** [2145]. **Scrapping** [263]. **SCRATCH** [597]. **scratchpad** [466, 842]. **Scriptable** [1888]. **scripting** [1150, 932, 1026, 736, 1536, 1648, 32, 777]. **scripts** [1785]. **SD** [1919]. **SD-PCM** [1919]. **SDN** [2304, 1884]. **SDNRacer** [2415]. **Seamless** [2053, 1824]. **seamlessly** [2309]. **Search** [1962, 140, 979, 1495, 1679, 938, 1632, 1704, 1785, 1068, 1516, 950, 1072, 1702, 2096, 989, 1761]. **search-based** [1785]. **searches** [106]. **SecondSite** [911]. **Secret** [1962, 2125]. **Secretary** [1221, 1565]. **Section** [2097, 1768]. **sections** [186]. **Secure** [2337, 2055, 1978, 624, 1721, 1195, 998, 491, 1018, 2432, 1826, 1418, 919, 1667]. **securely** [1513]. **Security** [1954, 251, 1836, 2054, 1953, 37, 198, 2431, 2009, 1133, 1197, 551, 1263, 700, 511]. **Security-Critical** [1954]. **Security-typed** [251]. **SEDURA** [1978]. **segment** [56]. **segmentation** [365]. **Sego** [2338]. **seismic**

[1347]. **Selection** [2367, 219, 1310, 489, 96, 1243, 1585, 2378, 403, 1906, 842, 685]. **Selective** [2147, 1644, 556, 118]. **selectors** [34]. **Self** [1868, 683, 773, 1154, 879, 204, 711, 512, 2224, 611, 1740, 779, 1915, 622, 381, 2007, 2184]. **Self-adjusting** [683, 204, 611, 1740]. **Self-certification** [773]. **self-collecting** [711]. **self-contained** [381]. **self-hosted** [779]. **self-interpretation** [622]. **self-interpreter** [2224]. **self-modifying** [512]. **Self-optimizing** [1154, 1915, 2184]. **Self-Representation** [1868]. **Self-stabilizing** [879]. **self-timed** [2007]. **SeLINQ** [1724]. **Semantic** [245, 1488, 1270, 435, 812, 1750, 632, 609, 1714, 2060, 527, 604, 1072, 1797, 252]. **Semantics** [1866, 35, 1979, 637, 2083, 1163, 1110, 851, 1480, 992, 2113, 793, 1730, 2302, 770, 1583, 1529, 1487, 1148, 1828, 1736, 1520, 1530, 2014, 2269, 1256, 769, 2238, 2037, 1103, 1137, 2066]. **semantics-aware** [2083]. **semantics-driven** [2238]. **semantics-preserving** [1163]. **SemCache** [2083]. **Semi** [1421, 103, 2002, 1049, 182]. **semi-automated** [1049]. **Semi-automatic** [1421, 103]. **semi-structured** [2002, 182]. **semirings** [1370]. **Sensing** [2333, 1440]. **Sensitive** [2054, 1839, 1953, 668, 1143, 1830, 1624, 752, 862, 1100, 1342, 1461, 2380]. **sensitivity** [164, 2017, 1406, 1289, 1644, 1589, 358, 1645]. **sensor** [1557, 474]. **sensors** [2311]. **separability** [197]. **separate** [2237]. **separated** [60]. **separating** [48]. **Separation** [1931, 529, 1515, 2230, 1124, 502, 1516, 1126, 885, 1517, 1673, 1641, 1272, 753, 228, 210, 376, 1790, 1452]. **Seq** [342]. **sequence** [1487, 106, 1713, 2130, 1063, 1793, 1831]. **sequences** [1067, 1585, 1633, 129, 651]. **Sequential** [4, 516, 975, 671, 962, 1217, 285, 639, 310, 1103, 430, 807, 448, 825]. **sequentially** [1634]. **sequents** [1516]. **Sequoia** [560]. **serial** [670]. **Serializability** [1957, 4]. **serializable** [309]. **Serialization** [2375, 1413]. **serializing** [1216]. **series** [1473]. **Server** [2294, 774, 904, 586, 443, 820]. **Server-side** [2294, 774]. **servers** [1178]. **service** [161, 550, 911, 791]. **Services** [1929, 2328, 2338, 1927, 932]. **Session** [2339, 391, 26, 2266]. **sessions** [2265, 1006]. **Set** [608, 1854, 1417, 112, 1480, 2404, 840, 482, 2376, 545]. **set-associative** [112]. **Set-based** [1417]. **Set-Theoretic** [1854, 608, 1480]. **Sets** [1865, 2275, 2140]. **Settable** [1739]. **setters** [1148]. **severe** [78]. **severity** [2069]. **SFI** [888]. **SHA** [1995]. **SHA-256** [1995]. **shaders** [87]. **Shadow** [2044]. **shadowing** [231]. **ShadowReboot** [1309]. **ShadowVM** [1554]. **Shake** [986]. **Shallow** [2298, 1749]. **ShamDroid** [2155]. **shape** [653, 1607, 1747, 260, 369, 2421]. **shape-polymorphic** [260]. **shapes** [370]. **Shared** [2353, 1959, 2322, 536, 1437, 149, 568, 91, 707, 657, 1302, 582, 148, 508, 1328, 1015, 314, 1709, 284, 74]. **shared-memory** [508, 1015, 284]. **sharing** [765, 1385, 1727, 1144, 1895, 640, 1676, 2081, 306, 289, 567, 155, 135]. **shelf** [1805]. **shell** [1307]. **shepherding** [1621]. **SHERIFF** [640]. **SherLog** [75]. **Shoestring** [94]. **SHORe** [1363]. **Short** [711, 2344, 1904, 381, 2007, 1907, 1383, 1902]. **Short-Lived** [2344]. **Short-term** [711]. **shortcut** [719]. **should** [1190]. **showing** [1093]. **Shredder** [2337]. **Shredding** [2337]. **Shrinking** [1093, 1672]. **side** [774, 613, 2294, 1240]. **side-channel** [1240]. **sided** [2069]. **Sidewinder** [2333]. **Sigma*** [1138]. **Signal** [1873, 472, 1274, 1739]. **signals** [1136]. **signatures** [1233]. **significance** [2093]. **significance-aware** [2093]. **SIGPLAN** [1220, 726, 1221, 1565, 1223, 1567, 1564, 1569, 727, 1224, 1568, 1222, 1566, 1219, 1563]. **Silent** [2337, 1712]. **SIMD**

[1327, 928, 1262, 929, 1364, 2380]. **SIMDization** [86]. **similarity** [2406, 1857, 1588]. **Simple** [1844, 1388, 600, 277, 193, 1828, 688, 2122, 589, 8]. **simpler** [2035]. **simplicity** [1559]. **simplified** [952]. **simplify** [1340]. **simplifying** [1040]. **SimTester** [907]. **Simulating** [1975]. **simulation** [1602, 851, 414, 840, 764, 1705]. **simulations** [1316]. **Simulator** [1932, 2376]. **Simulink** [851]. **Singe** [1685]. **Single** [1974, 405, 202, 585, 144, 1182]. **single-pass** [405]. **single-threaded** [1182]. **singletons** [1097]. **singularity** [209]. **Sir** [726]. **Sirius** [1933]. **site** [533, 2199]. **sites** [216]. **size** [1342, 1407, 1588]. **sizing** [2202, 1456]. **skeleton** [1696]. **skeletonization** [1708]. **skewing** [589]. **SLAW** [154]. **Slicing** [1611, 1614]. **slot** [694]. **small** [526, 1640, 1994]. **smalltalk** [1900, 1893, 1538]. **Smart** [850, 2131]. **SmartCheck** [1821]. **Smartphones** [1930]. **SMAT** [1261]. **SML#** [1735]. **SMO** [2262]. **Smooth** [187]. **smoothed** [1495]. **SMP** [1203, 1698]. **SMT** [245, 2203, 71, 1527, 2136]. **SMT-based** [2136]. **Smten** [1761]. **Snapshots** [2056, 937]. **Sneaking** [1000]. **snippets** [1277]. **Soft** [1968, 1733, 1331, 2384, 94, 848, 215, 111, 1235]. **soft-error** [2384]. **soft-error-prone** [1235]. **Software** [2372, 2360, 1952, 1954, 202, 1924, 476, 1055, 2064, 2358, 1056, 1181, 1626, 2151, 1283, 1610, 677, 1900, 449, 826, 1158, 2415, 409, 576, 1732, 2316, 271, 889, 332, 1029, 157, 93, 564, 1552, 1227, 408, 356, 1471, 1907, 1030, 967, 118, 1054, 66, 787, 195, 69, 786, 1167, 275, 784, 1906, 1184, 419, 2315, 1164, 1159, 8, 2175, 1905, 1326, 922, 429, 806, 151, 1446, 1165, 2066, 196, 1075]. **Software-Based** [2372]. **Software-Defined** [1952, 1626, 2415]. **software-only** [2151]. **solid** [468]. **solid-state** [468]. **solution** [1610, 309, 708, 61]. **solution-space** [61]. **Solutions** [1864, 850]. **solver** [245, 1542, 1649]. **solver-aided** [1542, 1649]. **solvers** [2086, 1527, 128]. **solving** [1496, 2181, 2204, 2233]. **SOS** [642]. **Sound** [1878, 1497, 1514, 2239, 758, 872, 1601, 1511, 1191, 2143, 1631, 1268, 1823, 2257, 1458]. **soundly** [1432]. **Soundness** [1871, 1391]. **Source** [2334, 2293, 1163, 1545, 90, 286]. **source-to-source** [1163]. **sources** [1086, 1781, 338]. **Sourcing** [1885]. **Space** [395, 1846, 1794, 2263, 1610, 1625, 1586, 526, 731, 1344, 544, 1354, 551, 921, 227, 61, 1654, 850]. **Space-Efficient** [1846, 1794, 544]. **space-leaks** [227]. **SpaceJMP** [2345]. **Spaces** [2345, 1863, 1504, 1076]. **spacetime** [1381]. **SPADE** [1590]. **spanning** [942]. **sparse** [259, 127, 131, 1912, 1261, 561, 874, 2030]. **spartan** [1760]. **spatial** [1295, 1637, 2386]. **SPC** [1298]. **SPC-indexed** [1298]. **Speakers** [2339]. **Specialization** [1614, 1913, 1685, 1912, 1536, 1207, 1902, 971, 872]. **Specialized** [2369, 1557, 220, 916]. **Specializing** [1901]. **Species** [347]. **Specific** [1971, 2307, 263, 562, 1234, 1170, 1265, 1749, 2204, 417, 1915, 2427, 962, 798, 278, 993, 1690, 423, 2310, 1909, 1890]. **Specification** [1876, 2281, 1168, 1486, 1501, 378, 1050, 302, 2027, 1558]. **specification-driven** [1168]. **Specifications** [1879, 500, 1270, 1138, 101, 516, 975, 1590, 661, 995, 2007, 57, 1020, 800, 192, 284, 2421]. **specified** [790]. **Specifying** [259, 2325, 435, 812, 89, 293, 1277]. **SPECS** [1954]. **spectrum** [1239]. **Speculation** [1973, 1961, 1187, 938, 70, 1193, 66, 1433, 1320]. **speculation-friendly** [938]. **Speculative** [957, 859, 885, 1053, 69, 228, 910, 1238, 958, 1797, 167, 672, 655, 168, 577, 151, 490]. **speculatively** [481]. **speed** [130, 106, 203, 1407, 935, 1831]. **speeding** [671]. **speedup** [670]. **SpiceC** [565]. **spill** [1581]. **spinlocks** [1315]. **Spiral** [1556]. **SPIRE** [1298]. **SPL** [1283]. **splicing** [1035].

Splittable [1469, 1777]. **splitting** [244, 133]. **SPMD** [314, 569]. **SpMV** [582, 1684]. **Sponge** [458, 835]. **Spoofax** [302]. **SprayList** [2058]. **spreading** [202]. **Spreadsheet** [509, 2307, 2249]. **spreadsheet-based** [2307]. **spreadsheets** [1780, 2002, 382]. **Sprint** [655]. **Sprinting** [2359, 1186]. **SPUR** [317]. **SQL** [2102]. **square** [282]. **squared** [356]. **SqueakJS** [1893]. **SR** [2042]. **SR-IOV** [2042]. **SSA** [1267, 490]. **SSA-based** [1267, 490]. **STABILIZER** [1191]. **stabilizing** [879]. **Stack** [1850, 1625, 1984, 683, 1770, 1664, 1311, 351, 603, 838]. **stack-based** [1664, 351]. **stack-space** [1625]. **Stackdb** [1674]. **stadium** [2297]. **stage** [207, 1260, 2309, 197]. **Staged** [1787, 1557, 363, 55, 2299]. **staging** [1913, 422, 1142]. **stall** [856]. **stall-free** [856]. **Stamped** [1850]. **Standard** [627]. **standardization** [1531]. **standards** [2388]. **STAPL** [581]. **StarL** [1975]. **State** [1840, 2371, 536, 238, 468, 1437, 1996, 249, 871, 1147, 1580, 309, 681, 228, 738, 349]. **statecharts** [1634]. **stateful** [17, 308]. **Stateless** [1997, 2141, 2139]. **statement** [1539]. **statements** [689, 1539]. **States** [2048, 2070, 1898]. **Static** [1967, 1110, 2329, 1799, 466, 363, 472, 788, 20, 1851, 2166, 2327, 2016, 2095, 1291, 364, 1957, 749, 782, 895, 393, 1753, 2126, 1612, 1228, 2109, 620, 276, 1534, 300, 1054, 2258, 2419, 839, 1180, 1418, 1667, 1524]. **Static-Dynamic** [1957]. **Static/dynamic** [2095, 1180]. **Statically** [1957, 1283, 1026, 174, 1236, 917]. **statically-typed** [174, 917]. **stationary** [642]. **statistic** [2090]. **Statistical** [2406, 1783, 966, 1639, 323]. **statistically** [1191]. **statistics** [1355, 1755]. **Steal** [1296]. **stealing** [1336, 154, 1032, 1670, 1322, 1296, 948, 133, 1359]. **steer** [2399]. **Steering** [1404]. **stencil** [2435, 1710, 720, 2018, 954]. **stencil-based** [954]. **Steno** [492]. **Step** [366, 797, 1245, 666]. **Step-indexed** [366]. **STG** [336]. **Sticky** [1808]. **still** [2115, 1078]. **STM** [150, 121, 1376]. **Stochastic** [1198, 1604, 2159]. **stock** [1758]. **Stop** [2196, 1192]. **stop-the-world** [1192]. **Storage** [1412, 2365, 2349, 2262, 1244, 1587, 1302, 379, 2291, 586, 919, 213, 549, 1305]. **store** [368]. **store-passing** [368]. **Stores** [1969, 2250, 2020]. **Storing** [2056]. **stragglers** [1720]. **strand** [134]. **Strategies** [1960, 1535, 949, 1412, 1114, 290, 342, 2291, 1359]. **strategy** [2170]. **Stratified** [2404]. **stream** [1764, 1762, 456, 833, 846, 1247, 458, 835, 1365, 465]. **stream-based** [465]. **Streaming** [405, 1977, 145, 1033, 945, 99, 2245, 845, 86, 923, 2387, 1344, 2082]. **StreamJIT** [1762]. **streamlining** [121]. **streams** [1992, 100, 994]. **StreamScan** [1337]. **strength** [761]. **strike** [45]. **String** [1842, 1671, 2233, 1843, 1468, 382]. **String-Manipulating** [1843]. **strings** [1652]. **stripped** [2018]. **strong** [2251, 357, 142, 2066]. **stronger** [888, 250]. **strongly** [1094, 1718]. **Structural** [1389, 2112, 1164]. **Structure** [115, 1468, 2193, 2003, 1720, 1559, 2176, 561, 1085, 1641, 1272, 469, 2433, 142, 1273]. **Structure-driven** [115]. **Structured** [1874, 2002, 161, 1397, 1688, 1380, 1992, 2290, 988, 100, 2420, 900, 1598, 284, 182, 2422, 2074]. **Structures** [1962, 2112, 1104, 1716, 2163, 2024, 2152, 1128, 1144, 1760, 464, 667, 489, 527, 936, 2140, 406, 737, 1512, 1410, 1142, 168, 1705, 1711, 1320, 178, 1073, 513]. **Structuring** [23]. **STT** [849]. **students** [256]. **Studio** [2295]. **Study** [1880, 432, 809, 1192, 1202, 1896, 1719, 1054, 2301, 287, 57, 800, 782, 2068, 1677, 2175]. **stuff** [1640]. **stutter** [292]. **stutter-equivalent** [292]. **style** [621, 795, 1395, 978, 1738, 1396]. **Sub** [1141, 968]. **sub-communicators** [968]. **Sub-polyhedral** [1141]. **subcubic** [1798]. **subject** [1375]. **Subjective** [1147].

Subjects [1870]. **submission** [1573]. **Submodules** [1544]. **subset** [1419]. **substitution** [630]. **substrate** [90, 211]. **substructural** [248, 985, 676]. **subsystem** [1672]. **subsystems** [1594]. **subtype** [25]. **Subtyping** [607, 245, 608, 609]. **successive** [926]. **Succinct** [1865, 273]. **suffix** [1334]. **sugar** [1633]. **SugarHaskell** [1100]. **SugarJ** [663]. **suite** [678]. **sum** [56]. **summaries** [530]. **Summary** [1839]. **Summary-Based** [1839]. **sums** [1511, 2424]. **Super** [1919, 2194]. **Superblock** [1301]. **SuperC** [882]. **supercharged** [1416]. **Supercompilation** [346, 264]. **supercomputer** [552]. **Superficially** [985]. **SuperMalloc** [2194]. **Superoptimization** [2341, 1594, 1198, 2146]. **superposition** [529]. **superscalar** [951]. **superword** [884]. **Support** [1966, 1926, 1952, 1917, 1956, 2307, 1187, 2205, 1218, 67, 1576, 854, 917, 146, 122, 2198, 916, 441, 818, 88, 433, 810, 1898, 1069, 1174, 1431, 212]. **supported** [647, 1040]. **Supporting** [1561, 153, 215, 297, 1927, 168, 2042, 180, 560, 2012, 1433]. **surgery** [2229]. **Surgical** [1603]. **Surprise** [2374]. **surprises** [2181]. **survey** [1770]. **SurveyMan** [1763]. **Surveyor** [1094]. **surveys** [1094, 1763]. **survival** [543]. **suspension** [948]. **Swapping** [2045, 1657]. **sweat** [1640]. **sweep** [1455]. **sweeping** [1595]. **Sweeten** [1891]. **Swift** [1356, 908]. **Swift/T** [1356]. **switch** [1070, 1672, 1739]. **symbiosis** [71]. **symbiotic** [554]. **symbol** [714]. **Symbolic** [1779, 2234, 2382, 149, 299, 2261, 1527, 1859, 1857, 738, 852, 2128, 1138, 2230, 1200, 1522, 2006, 892, 200, 871, 162, 1404, 1796, 525, 1044, 1045, 1649]. **symbolic-heap** [2230]. **Symbolically** [595]. **SymCall** [554]. **Symmetric** [386]. **symmetry** [2229]. **SYNC** [2075]. **synchrobench** [2057]. **synchronisation** [2071]. **Synchronising** [881]. **Synchronization** [2320, 536, 969, 2375, 1921, 1923, 2326, 1956, 396, 752, 947, 2057, 2080, 1687, 1989, 28, 1337]. **synchronized** [364]. **synchronizing** [1357]. **Synchronous** [473, 471, 101, 1791, 1352, 2253, 472, 843, 1634]. **synergistic** [495]. **Synopsis** [2339]. **Syntactic** [753, 1368, 663, 696, 2239, 1633, 1857, 1171, 252]. **syntactic/semantic** [1857]. **syntax** [1010, 1384, 1480, 1663, 331, 1551, 630, 334]. **Synthesis** [1885, 1886, 2038, 487, 2142, 1426, 1140, 2222, 56, 645, 2037, 2400, 2281, 953, 1168, 1327, 2101, 2280, 2308, 1495, 1251, 102, 2282, 384, 620, 892, 485, 890, 2404, 277, 190, 2034, 891, 2412, 2000, 1333, 991, 2001, 2039, 1638, 1637, 2423, 2144, 1422, 1778, 2410, 27, 524, 28, 644, 1634]. **synthesis-aided** [1637]. **Synthesising** [865]. **synthesizable** [281]. **Synthesizing** [2003, 889, 486, 2161, 454, 831, 2031, 1161, 1998, 651, 2422, 1559, 166, 1036]. **System** [2331, 2332, 2365, 2325, 2226, 2056, 1931, 2338, 1924, 2352, 2044, 1386, 1918, 1646, 461, 68, 1666, 1194, 984, 1335, 1397, 1560, 2143, 877, 450, 827, 1195, 696, 1050, 1059, 1517, 381, 21, 313, 288, 745, 772, 66, 2149, 1735, 100, 15, 1036, 97, 866, 441, 818, 1696, 1906, 1213, 1164, 2376, 1726, 697, 534, 353, 2093, 579, 172, 212, 1360, 1868, 1575]. **system-level** [97]. **system-of-systems** [1560]. **system-software** [1906]. **Systematic** [510, 1439, 286, 1556, 336, 2085]. **Systems** [1960, 2329, 2360, 2353, 1972, 1872, 2356, 1975, 1833, 1823, 1917, 2374, 1938, 1947, 1970, 2322, 1460, 143, 1285, 2065, 473, 109, 1526, 1502, 431, 808, 58, 2077, 2385, 1829, 2070, 2277, 205, 449, 826, 2256, 1200, 1204, 1560, 90, 2295, 2312, 1332, 853, 472, 1278, 1574, 91, 1196, 2251, 1342, 1244, 154, 276, 67, 460, 837, 1722, 1210, 841, 1214, 25, 923, 64, 1312, 1901, 1529, 913, 2191, 2084, 220, 546, 582, 1533, 107, 849, 1673, 1067, 2035, 1719, 1211, 702, 2078, 1054, 1245, 1240, 2222, 708, 416, 1888, 42, 1817, 1188, 134, 181, 1642, 2377, 839, 478]. **systems** [1745, 994, 800, 999, 1826, 1235, 782, 1136, 310, 954, 1103, 229, 465, 1665,

1248, 971, 2015, 1309, 907, 2428].

T [2319, 15, 1356]. **table** [509, 998, 970, 714]. **Tables** [2044]. **Tablets** [1930]. **Tabular** [1505]. **tackling** [2109]. **tactic** [1369]. **tagging** [1274]. **Tail** [1929, 2328]. **Tailoring** [784]. **taint** [1624, 699]. **Taking** [1408, 273]. **Tales** [1005]. **Talk** [1052]. **Tame** [2332]. **Taming** [533, 1269, 1043, 1597, 2271, 534, 621, 882, 1214, 2192, 2299]. **tao** [483]. **Tardis** [1756]. **Target** [2328, 2364]. **Target-Driven** [2328]. **Targeted** [1439, 1951]. **Targeting** [470]. **Task** [467, 315, 1710, 1974, 488, 2288, 1342, 1058, 478, 948, 961, 1711, 1356, 1435]. **task-based** [961, 1711]. **Task-level** [467]. **Tasks** [1832, 2322, 1338, 215]. **Taurus** [2352]. **TaxDC** [2356]. **Taxonomy** [2356]. **TCP** [910, 2344]. **teaching** [205, 1734]. **TeachScheme** [247]. **TeamWork** [1357]. **teasing** [918]. **technique** [481, 1703, 946, 947, 480, 407, 1245, 561, 1409]. **Techniques** [2050, 2358, 536, 704, 1205, 1301, 1578, 903, 1540, 898, 1344, 547]. **technologies** [1896]. **Technology** [63]. **TeJaS** [1533]. **Temperature** [1935]. **Temperature-** [1935]. **Template** [1088, 1547, 799, 54, 1909, 541, 1088]. **Templates** [1163]. **Temporal** [2414, 616, 2228, 224]. **Temporally** [1921]. **ten** [452, 829]. **tensor** [2272]. **term** [711]. **Termination** [717, 1871, 2027, 1378, 2248, 747, 1317, 999]. **terms** [266]. **Terra** [1260]. **Tesseract** [1657]. **Test** [1638, 883, 1598, 520, 504, 648, 887, 943, 1754, 1788, 1778]. **Test-case** [883]. **Test-driven** [1638, 1598, 648]. **testbed** [1186]. **tested** [1148]. **Testing** [1402, 1091, 2049, 643, 1602, 1562, 1439, 45, 2394, 1438, 462, 116, 1996, 648, 308, 1907, 1268, 476, 1393, 1677, 2085, 651, 2215, 1042, 907]. **Tests** [1859, 757, 1998]. **text** [182]. **thanks** [727]. **their** [623, 2137, 1014, 2300]. **them** [2125, 274]. **theme** [1096]. **Theorem** [804, 1531, 1518, 1101, 761, 633, 1119, 529, 981]. **Theorem-based** [804]. **theorems** [674, 1383]. **Theoretic** [1854, 233, 608, 1480, 2282, 2276]. **Theoretical** [1717]. **theories** [1515, 2408, 2008]. **theory** [2225, 1742, 1519, 1367, 771, 1612, 1398, 2227, 1390, 1118, 599, 705, 1084, 1583, 631, 16, 754, 1268, 476, 1745, 1506, 676, 1456, 1201]. **There** [1748, 856]. **thereof** [853]. **thermal** [79]. **these** [2115]. **thin** [2269]. **thin-air** [2269]. **things** [2221]. **third** [297, 633]. **third-party** [297]. **Thread** [571, 134, 1442, 2097, 1205, 202, 1687, 1771, 899, 1706, 138, 1326, 1683]. **thread-level** [1683]. **threaded** [1423, 383, 1717, 134, 69, 2095, 1031, 1182, 540]. **Threading** [1963, 1350, 1273]. **threads** [1357, 459, 836, 1055, 2185, 2079]. **three** [1665, 1165]. **three-level** [1165]. **Threesomes** [31, 1399]. **Thresher** [1276]. **throttling** [90]. **Throughput** [1977, 910]. **thus** [1468]. **TIC** [2383]. **ticket** [1315]. **tier** [1669]. **TigerQuoll** [1339]. **tightening** [112]. **tightly** [1986]. **Tiles** [2099]. **tiling** [2381, 403]. **Time** [1972, 1850, 1970, 589, 668, 83, 512, 856, 1231, 1815, 1756, 488, 1809, 1586, 623, 2426, 1247, 470, 276, 1583, 1656, 841, 710, 1459, 1992, 840, 215, 642, 1347, 313, 602, 745, 1455, 10, 416, 796, 176, 423, 57, 291, 2419, 222, 2021, 758, 324, 791, 1672, 1069, 782, 1136, 217, 133, 465, 687, 2075, 1309, 75, 1689]. **time-aware** [313]. **Time-Stamped** [1850]. **time-travel** [1756]. **Time-Warp** [1689]. **timed** [2007]. **times** [2201, 1454]. **Timing** [1953, 455, 832, 103, 999, 592, 863]. **timing-aware** [455, 832]. **Timing-Sensitive** [1953]. **tiny** [375, 838]. **TLB** [92]. **TLMs** [104]. **TOCTTOU** [921]. **together** [2411, 2021]. **toggling** [2389]. **tolerance** [1331, 1358, 944, 1212, 911, 1122]. **tolerant** [984, 2253, 1317, 176]. **tolerate** [1278]. **Tool** [647, 1971, 2307, 126, 462, 597,

2205, 650, 1697, 2310, 2416, 1042]. **Tool-supported** [647]. **toolchain** [109, 57]. **toolkit** [626]. **toolkits** [425]. **tools** [2302, 356, 326, 165, 53]. **top** [873, 451, 828, 1623]. **top-down** [873, 1623]. **Topaz** [2178]. **Topologies** [1937]. **topology** [169, 927]. **topology-aware** [927]. **Total** [262]. **Tower** [333]. **toys** [205]. **TPC** [2328]. **Trace** [1865, 1924, 1678, 317, 488, 1068, 460, 837, 886, 1025, 685, 569, 2273]. **trace-based** [317, 1068, 460, 837, 886, 1025, 569]. **Traceable** [204]. **Tracelet** [1632]. **Tracelet-based** [1632]. **traces** [402, 1720, 1463]. **Tracing** [221, 1483, 2184, 1153, 2104, 2396, 776, 1296, 1240, 2291, 475, 474]. **Tracking** [2293, 2370, 913, 216, 1724, 349]. **Tracks** [1463]. **Tractable** [1883]. **Trade** [2050]. **Trade-offs** [2050]. **Tradeoff** [1977, 1407]. **tradeoffs** [917, 1489]. **Trading** [2321]. **Traffic** [1204]. **Trail** [1444]. **Traité** [1372]. **Transaction** [575, 1017]. **Transactional** [2373, 1922, 47, 2433, 2330, 2065, 123, 1353, 431, 808, 432, 809, 149, 1340, 1689, 175, 576, 1715, 146, 122, 118, 1686, 158, 1814, 119, 1326, 2066, 120]. **Transactions** [2348, 1576, 3, 1999, 2121, 574, 575, 69, 2064]. **transducer** [1635]. **transducer-based** [1635]. **transducers** [405, 2245, 41, 2233, 738]. **transfer** [566, 1985]. **Transfers** [1967]. **Transform** [583]. **transformation** [2303, 1561, 2206, 1087, 292, 345]. **transformational** [43, 1908]. **Transformations** [1842, 2062, 1163, 2379, 2263, 2003, 509, 254, 160, 1262, 764, 49, 1030, 51, 510, 401, 638, 1774, 2183, 2030, 634, 44, 2422, 762, 763]. **transformers** [2169, 982, 1470]. **Transforming** [2249]. **transient** [1619]. **Transistors** [205]. **TRANSIT** [1277]. **transition** [1526]. **Translating** [101, 1803]. **Translation** [2379, 1293, 1242, 637, 363, 2236, 1298, 220, 840, 2290, 368, 89, 507, 113]. **translation-aware** [89]. **translations** [1407]. **translator** [488, 1579]. **Transparent** [914, 2045, 1183, 461, 146, 666, 289, 108, 922]. **Transporting** [990]. **transposition** [1692, 1693]. **trapped** [702]. **trash** [2200]. **travel** [1756]. **traveled** [1404]. **Traveling** [1309]. **traversal** [1035, 934, 1013]. **traversal-based** [1013]. **traversals** [1467, 667, 1035, 2016]. **Treasurer** [1222, 1566]. **Tree** [2011, 244, 140, 161, 938, 1635, 2396, 2138, 1035, 1663, 41, 379, 737, 2096, 1296]. **tree-structured** [161]. **trees** [1703, 1704, 2260, 610, 1324, 1702]. **Treewidth** [1840, 2277]. **Tribal** [312]. **tridiagonal** [128]. **tries** [1808, 937, 1902, 2182]. **triggered** [1055]. **TrilobiteG** [1980]. **Triolet** [1696]. **True** [2336]. **Trusted** [2338, 1486]. **Trustworthy** [659]. **TSO** [2139, 1990, 1921, 1256, 1215]. **TSO-preserving** [1215]. **TSO_ATOMICITY** [1215]. **tunable** [1604, 1409]. **tuner** [1261]. **Tuning** [2343, 583, 712, 1691]. **tunneled** [2407]. **tuple** [2424]. **tuple-based** [2424]. **tuples** [1258]. **Turning** [1436]. **Twig** [1162]. **twin** [605]. **twitter** [1804]. **Two** [1870, 665, 591, 55, 1571, 309, 1245, 2210, 2125, 1141]. **two-level** [2210]. **two-phase** [1571]. **two-staged** [55]. **two-state** [309]. **two-step** [1245]. **two-variable-per-inequality** [1141]. **TxRace** [2330]. **Type** [695, 2225, 1367, 1854, 198, 880, 1725, 1855, 1534, 2220, 1833, 296, 2039, 878, 13, 2214, 1015, 668, 1646, 1519, 1432, 771, 1468, 2164, 1124, 1900, 775, 1557, 984, 1525, 2254, 174, 2256, 1485, 1419, 613, 1532, 1827, 1824, 1255, 2261, 2187, 2295, 2282, 46, 1549, 384, 875, 276, 696, 1091, 1536, 2294, 200, 1555, 1533, 754, 1391, 2239, 313, 1054, 426, 413, 270, 1819, 772, 2390, 1781, 2136, 1484, 403, 766, 2419, 994, 1070, 1393, 2213, 782, 697, 534, 1258, 1012, 289, 374, 172, 1982, 777]. **Type-and-example-directed** [2039].

Type-based [1725, 1015, 403]. **type-checking** [426, 1819]. **type-dependent** [2239]. **Type-directed** [880, 878, 1484]. **type-level** [174, 374]. **Type-preserving** [198]. **type-reflective** [46, 426]. **Type-safe** [2220, 1419, 289, 172]. **type-soundness** [1391]. **type-theoretic** [2282]. **Type-theory** [1367]. **typechecker** [2204]. **typecheckers** [773]. **typechecking** [1400]. **Typed** [1368, 622, 1899, 273, 1094, 1535, 1412, 1482, 1026, 775, 987, 174, 1097, 917, 1664, 1472, 2284, 251, 368, 2300, 266, 199, 32, 1369]. **typemaps** [1162]. **Types** [1837, 1854, 1886, 1834, 1856, 2420, 1835, 204, 2225, 1765, 393, 1109, 1764, 471, 267, 1373, 316, 1501, 2226, 1480, 760, 1048, 1062, 2113, 1606, 391, 2203, 983, 1092, 1131, 26, 1257, 1253, 1007, 241, 1429, 24, 2266, 2247, 985, 315, 1089, 1361, 2210, 404, 2423, 250, 12, 496, 2122, 2249, 18, 624, 2243, 11, 980, 246, 392, 676, 1820, 1744, 2106, 2409, 1741, 347, 2135, 1115]. **TypeScript** [1752, 2295, 1845, 2409]. **Typestate** [1072, 500, 2189, 447, 824]. **Typestate-based** [1072]. **typestate-oriented** [2189]. **Typing** [1007, 1845, 1766, 37, 2126, 1525, 746, 2255, 2109, 675, 2408, 1513, 1060, 2257, 1892].

U [1868]. **Ugly** [1938]. **UI** [1259, 1156]. **ULCC** [568]. **ultimate** [1581]. **unambiguous** [328]. **Unbelievable** [1941]. **unbound** [629]. **Unbounded** [1863, 1652]. **Unboundedness** [2235]. **Uncertain** [2319, 1066, 2221]. **unconstrained** [1114]. **undeclared** [2301]. **undefinedness** [2013]. **Underspecified** [729]. **Understanding** [1467, 861, 1771, 497, 1071, 1034, 2196, 514, 323, 358, 506]. **underwater** [1980]. **undocumented** [1054]. **unification** [2117]. **Unified** [1975, 1378, 765, 960, 2084, 1237]. **unifies** [1696]. **uniform** [1538]. **Unifying** [1380, 1396, 939, 334, 1774]. **Unikernels** [1211]. **unintrusive** [1189]. **union** [983, 2133]. **Unique** [1864, 631, 2122]. **Uniqueness** [1016]. **unit** [116, 1141]. **unit-** [1141]. **united** [2105]. **units** [2204, 1819]. **Universal** [1116, 1460, 2428]. **universe** [2117]. **universes** [1808]. **unleashing** [5]. **unmarshalling** [1007]. **unmodified** [1039]. **unordered** [559]. **unparser** [799]. **unparser-completeness** [799]. **Unpicking** [918]. **unreliable** [1405]. **unsafe** [2177]. **unsaturated** [330]. **unstaging** [363]. **unstructured** [2068]. **unsynchronized** [2097]. **Untrusted** [2338, 1194, 1195]. **untyped** [246, 32]. **unused** [2301]. **Unverified** [1878]. **upcalls** [554]. **update** [253, 1772, 1196, 107, 2149, 1991]. **Updates** [2350, 2059, 357, 2000, 1351, 634]. **updating** [1029, 1030]. **upgrade** [327]. **upgrades** [327]. **uptrees** [1406]. **Ur** [174, 1844]. **Ur/Web** [1844]. **usability** [2295, 1054]. **usable** [1627]. **usage** [20, 294, 791]. **Use** [1804, 2177, 1716, 533, 1900, 778, 269, 285, 120]. **use-case** [778]. **use-site** [533]. **used** [177]. **useless** [481]. **user** [677, 568, 2312, 1166, 59, 604, 551, 921, 1754, 1651, 749]. **user-defined** [1651]. **user-extensible** [749]. **user-level** [568]. **user-space** [551, 921]. **users** [803]. **userspace** [1672]. **uses** [2125]. **Using** [1384, 1969, 1876, 2329, 623, 1340, 1721, 1278, 2349, 1755, 1896, 1552, 42, 1923, 1184, 243, 1951, 2048, 954, 142, 2175, 2330, 1088, 1187, 2225, 1056, 1914, 180, 2002, 1033, 488, 263, 348, 137, 1495, 1469, 2026, 1200, 992, 1606, 1791, 34, 371, 870, 1346, 2295, 1307, 2260, 1549, 1785, 653, 2038, 382, 1253, 1249, 2317, 1302, 519, 1212, 459, 836, 2247, 654, 1537, 295, 848, 1233, 2425, 65, 546, 1023, 903, 840, 2399, 297, 1811, 514, 146, 1668, 1585, 339, 476, 1074, 2195, 1641, 2229, 2096, 69, 484, 403, 1046, 129, 2315, 1427, 1044, 2249, 511, 1898, 2119, 1932]. **using** [1677, 228, 1141, 1800, 1248, 1709, 641, 197, 87, 1309, 2042, 513, 144, 545]. **utility** [2202, 178]. **Utilization** [2368, 1231, 845].

V2E [922]. **valgrind** [206]. **validate** [800].

Validation
[1796, 2379, 1620, 2095, 1293, 507, 1183].
validator [8]. **Valor** [2151]. **value**
[2250, 1461, 624, 228, 507].
value-dependent [624]. **value-graph** [507].
values [692, 2207]. **VARAN** [1941].
Variability [686, 1059, 2315, 412].
Variability-aware [686, 1059, 2315].
variable [1255, 1238, 1141].
variable-length [1238]. **variance**
[533, 1489]. **Variant** [2343, 2314]. **variants**
[2209]. **Variation**
[1935, 2293, 409, 411, 1172].
Variation-Aware [1935]. **variation-point**
[411]. **variational** [984, 1905]. **Variations**
[2209, 72, 1096]. **Vector**
[381, 127, 1912, 1261, 1365, 2029, 2130].
Vectorisation [1090, 1004]. **Vectorization**
[2160, 2434, 886, 160, 2173, 1364, 2380].
vehicle [1591]. **vehicles** [1721, 1980]. **Verdi**
[2015]. **VeriCon** [1626]. **verifiable** [1313].
Verification
[1878, 1995, 1880, 751, 1925, 527, 1627, 967,
1979, 1989, 405, 2, 4, 2263, 1327, 1494, 37,
1363, 1501, 1625, 265, 636, 198, 2417, 502,
2071, 2431, 661, 175, 397, 394, 635, 1640, 982,
2237, 41, 943, 1292, 2153, 1391, 698, 2228, 23,
1733, 2429, 2229, 362, 439, 816, 1988, 2416,
596, 2432, 27, 1159, 1108, 1789, 172, 1267].
Verified [1851, 2435, 2338, 356, 2418, 10,
981, 1362, 9, 1990, 1294, 1600, 1493, 1471,
1022, 21, 2116, 336, 1020, 360, 1293, 1427,
173, 8, 2179, 762, 1492]. **verifier**
[1021, 1397, 162]. **verifiers** [889]. **verify**
[800]. **Verifying**
[2331, 1502, 1405, 1200, 2393, 887, 1975,
2335, 1197, 404, 1286, 1991, 259, 1626, 2154,
383, 764, 89, 1609, 2392, 2015, 2428].
VeriML [266]. **Versatile** [2157, 97].
version [576, 1941]. **versioning** [1898, 1794].
versions [1627]. **versus** [1052]. **via**
[1708, 637, 1181, 2073, 1518, 536, 2147, 1150,
363, 1885, 1428, 1704, 90, 2006, 565, 910, 2060,
1068, 7, 16, 1801, 854, 1516, 1040, 1406, 1510,
2350, 2009, 858, 1620, 2159, 2121, 70, 2298,
2290, 1461, 532, 1986, 1621, 2287, 1907, 1927,
698, 239, 2080, 1268, 2170, 1797, 2031, 292,
1122, 2272, 522, 364, 1909, 1605, 577, 1045,
867, 1789, 2321, 2354, 429, 806, 1182, 74].
Vice [1220, 1564]. **Vice-Chair** [1220, 1564].
view [253, 1804, 2131, 904]. **views**
[1466, 969, 1775, 603, 1125]. **violation**
[515, 1217]. **violations** [1782, 899, 1897].
Virgil [1258]. **VirtCL** [2072]. **Virtual**
[1795, 692, 2056, 2345, 1658, 2049, 678, 2185,
2044, 553, 2163, 779, 1304, 538, 910, 1656,
1312, 1302, 1664, 546, 906, 218, 2291, 544,
1698, 1306, 1672, 547, 1649, 1655, 541, 905,
548, 213, 1314, 1305]. **virtualisation** [470].
Virtualization
[537, 904, 2041, 542, 325, 1666, 552, 554,
1209, 539, 551, 909, 919, 556, 553, 922].
virtualization-driven [542]. **Virtualized**
[2047, 95, 2042, 1671, 208, 1202, 903, 1673, 51].
virtualizing [603]. **virtually** [60]. **Vision**
[1933]. **visitors** [1545]. **Visual** [2295, 375].
visualization [864, 1908]. **visualizing**
[1423]. **vivo** [449, 826]. **VLIW** [841, 1593].
VM
[1657, 1307, 920, 543, 918, 2048, 2050, 2051].
VM-protected [920]. **VM/application**
[918]. **VMKit** [211]. **VMM** [1308, 554].
VMM-to-guest [554]. **VMs** [1203, 2377].
VMScatter [1304]. **VMware** [2043].
VOBLA [1591]. **Voice** [1933]. **Volatile**
[2337, 1920, 1918, 1776, 437, 814, 1243].
Volition [1217]. **vs**
[559, 2184, 189, 782, 2321]. **vulnerability**
[111]. **Vulnerable** [2055].

WACI [2339]. **Wait**
[580, 965, 1082, 936, 592, 1705, 1216].
Wait-free [580, 965, 1082, 936, 592, 1705].
Wait-n-GoTM [1216]. **WAN** [548]. **wand**
[1517]. **want** [1544, 707]. **wanted** [2057].
Warehouse [2368, 1933, 1932, 1180].
Warehouse-Scale [1932]. **warnings**
[1270, 2137]. **warp** [1685, 584, 1689]. **Waste**

[707]. **Watson** [1946]. **wavefront** [2076]. **wavelength** [65]. **wavelength-based** [65]. **way** [671, 2312, 1901]. **WCET** [841, 1249, 2383, 103, 842, 1584, 1974]. **WCET-Aware** [1974, 841, 842]. **Weak** [1958, 1385, 587, 1602, 2, 1322, 2395, 1991, 1790, 197]. **weakest** [698]. **Wear** [1978, 468]. **Wear-leveling** [1978, 468]. **wearable** [1278]. **web** [2308, 2103, 1824, 1755, 1896, 1825, 2100, 1662, 2398, 932, 1341, 1880, 1844, 623, 1166, 680, 1074, 2053, 876, 1548, 699, 792, 713]. **web-application** [2103]. **web-based** [2308]. **WebCL** [1896]. **Weighted** [1872]. **weights** [1253]. **Well** [1688, 358]. **Well-structured** [1688]. **Wellfounded** [1378]. **were** [856]. **Whalesong** [1541]. **Which** [2122]. **while** [83]. **Whirlpool** [2327]. **White** [1066]. **whole** [1291]. **widening** [1285]. **width** [379]. **WiFi** [553]. **Wild** [2339, 649, 2177]. **wildcards** [533, 1767, 534]. **will** [428, 805]. **willing** [274]. **window** [1098, 567]. **wired** [553]. **Wireless** [2320, 1947, 474, 553]. **WiSync** [2320]. **within** [1960, 251, 243]. **without** [1743, 591, 2181, 1640, 1007, 1086, 1381, 1032, 1699, 2032, 270, 31, 1956, 2076, 685, 1337, 1831]. **word** [2233]. **words** [1362]. **Work** [1032, 1004, 1359, 1336, 1052, 154, 559, 1670, 1322, 1296, 1014, 2081, 948, 133]. **work-efficiency** [559]. **Work-stealing** [1032, 1359, 154, 1670, 1322, 948, 133]. **workbench** [302]. **Worker** [1729]. **Worker/wrapper/makes** [1729]. **Workflow** [2354]. **working** [545]. **Workload** [549, 158]. **Workload-aware** [549]. **workloads** [2073, 2387]. **World** [2361, 1984, 1192, 861, 2221, 1736, 1783, 1820, 1409]. **worlds** [366]. **Wormholes** [1095]. **worst** [1583]. **worst-case** [1583]. **would** [1887]. **wrangling** [206]. **Write** [2347, 1919, 1920, 230, 1243, 1242]. **Write-Ahead** [2347]. **Write-Efficient** [1920]. **write-mode** [1243]. **Writer** [1956, 1330, 1340, 719]. **Writer-Initiated** [1956]. **writing** [1916, 1500, 1823, 1020]. **written** [1410]. **wrong** [285]. **WuKong** [1360].

X10 [1681, 1786, 117, 948, 1680, 1318]. **x86** [2389, 2404, 2018, 888, 1325, 587, 1990, 10]. **x86-64** [2404]. **x86-TSO** [1990]. **Xbase** [1170]. **Xbox** [375]. **Xen** [215, 539]. **XIR** [210]. **xmonad** [1098]. **XQuery** [2109]. **XSafe** [1825]. **XSS** [2233].

Yang [1910]. **yaSpMV** [1684]. **years** [1283, 1498, 452, 829, 2115]. **yieldpoint** [2196]. **Yin** [1910]. **Yin-Yang** [1910]. **yourself** [1011].

Z [203]. **Z-rays** [203]. **Zero** [2337, 2336, 2032, 1737]. **Zero-Cost** [2337, 1737]. **Zero-overhead** [2032]. **zeroing** [658]. **zippers** [603]. **Ziria** [1947]. **zoo** [1597]. **ZOOMM** [1341].

References

Gershenfeld:2010:RAL

[1] Neil Gershenfeld, David Dalrymple, Kailiang Chen, Ara Knaian, Forrest Green, Erik D. Demaine, Scott Greenwald, and Peter Schmidt-Nielsen. Reconfigurable asynchronous logic automata: (RALA). *ACM SIGPLAN Notices*, 45(1):1–6, January 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Atig:2010:VPW

[2] Mohamed Faouzi Atig, Ahmed Bouajjani, Sebastian Burckhardt, and Madanlal Musuvathi. On the verification problem for weak memory models. *ACM SIGPLAN Notices*, 45(1):7–18, January 2010. CODEN SINODQ. ISSN

0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Koskinen:2010:CGT

[3] Eric Koskinen, Matthew Parkinson, and Maurice Herlihy. Coarse-grained transactions. *ACM SIGPLAN Notices*, 45(1):19–30, January 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Attiya:2010:SVS

[4] H. Attiya, G. Ramalingam, and N. Rinetzky. Sequential verification of serializability. *ACM SIGPLAN Notices*, 45(1):31–42, January 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Godefroid:2010:CMM

[5] Patrice Godefroid, Aditya V. Nori, Sriram K. Rajamani, and Sai Deep Tetali. Compositional may-must program analysis: unleashing the power of alternation. *ACM SIGPLAN Notices*, 45(1):43–56, January 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Chaudhuri:2010:CAP

[6] Swarat Chaudhuri, Sumit Gulwani, and Roberto Lublinerman. Continuity analysis of programs. *ACM SIGPLAN Notices*, 45(1):57–70, January 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Harris:2010:PAS

[7] William R. Harris, Sriram Sankaranarayanan, Franjo Ivančić, and Aarti Gupta. Program analysis via satisfiability modulo path programs. *ACM SIGPLAN Notices*, 45(1):71–82, January 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Tristan:2010:SVV

[8] Jean-Baptiste Tristan and Xavier Leroy. A simple, verified validator for software pipelining. *ACM SIGPLAN Notices*, 45(1):83–92, January 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Chlipala:2010:VCI

[9] Adam Chlipala. A verified compiler for an impure functional language. *ACM SIGPLAN Notices*, 45(1):93–106, January 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Myreen:2010:VJT

[10] Magnus O. Myreen. Verified just-in-time compiler on x86. *ACM SIGPLAN Notices*, 45(1):107–118, January 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Terauchi:2010:DTC

[11] Tachio Terauchi. Dependent types from counterexamples. *ACM SIGPLAN Notices*, 45(1):119–130, January 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Rondon:2010:LLL

[12] Patrick Maxim Rondon, Ming Kawaguchi, and Ranjit Jhala. Low-level liquid types. *ACM SIGPLAN Notices*, 45(1): 131–144, January 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Schafer:2010:TID

[13] Max Schäfer and Oege de Moor. Type inference for datalog with complex type hierarchies. *ACM SIGPLAN Notices*, 45(1):145–156, January 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Henzinger:2010:BQN

[14] Thomas A. Henzinger. From Boolean to quantitative notions of correctness. *ACM SIGPLAN Notices*, 45(1):157–158, January 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Pitts:2010:NS

[15] Andrew M. Pitts. Nominal system T. *ACM SIGPLAN Notices*, 45(1): 159–170, January 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Hobor:2010:TIA

[16] Aquinas Hobor, Robert Dockins, and Andrew W. Appel. A theory of indirection via approximation. *ACM SIGPLAN Notices*, 45(1):171–184, January 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Dreyer:2010:RML

[17] Derek Dreyer, Georg Neis, Andreas Rossberg, and Lars Birkedal. A relational modal logic for higher-order stateful ADTs. *ACM SIGPLAN Notices*, 45(1):185–198, January 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Suter:2010:DPA

[18] Philippe Suter, Mirco Dotta, and Viktor Kuncak. Decision procedures for algebraic data types with abstractions. *ACM SIGPLAN Notices*, 45(1):199–210, January 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Magill:2010:ANA

[19] Stephen Magill, Ming-Hsien Tsai, Peter Lee, and Yih-Kuen Tsay. Automatic numeric abstractions for heap-manipulating programs. *ACM SIGPLAN Notices*, 45(1):211–222, January 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Jost:2010:SDQ

[20] Steffen Jost, Kevin Hammond, Hans-Wolfgang Loidl, and Martin Hofmann. Static determination of quantitative resource usage for higher-order programs. *ACM SIGPLAN Notices*, 45(1):223–236, January 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Malecha:2010:TVR

[21] Gregory Malecha, Greg Morrisett, Avraham Shinnar, and Ryan Wisnesky.

Toward a verified relational database management system. *ACM SIGPLAN Notices*, 45(1):237–248, January 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Podelski:2010:CGF

[22] Andreas Podelski and Thomas Wies. Counterexample-guided focus. *ACM SIGPLAN Notices*, 45(1):249–260, January 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Nanevski:2010:SVH

[23] Aleksandar Nanevski, Viktor Vafeiadis, and Josh Berdine. Structuring the verification of heap-manipulating programs. *ACM SIGPLAN Notices*, 45(1): 261–274, January 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Jia:2010:DTP

[24] Limin Jia, Jianzhou Zhao, Vilhelm Sjöberg, and Stephanie Weirich. Dependent types and program equivalence. *ACM SIGPLAN Notices*, 45(1): 275–286, January 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Hutchins:2010:PSS

[25] DeLesley S. Hutchins. Pure subtype systems. *ACM SIGPLAN Notices*, 45(1):287–298, January 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Gay:2010:MST

[26] Simon J. Gay, Vasco T. Vasconcelos, António Ravara, Nils Gesbert, and Alexandre Z. Caldeira. Modular session types for distributed object-oriented programming. *ACM SIGPLAN Notices*, 45(1):299–312, January 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Srivastava:2010:PVP

[27] Saurabh Srivastava, Sumit Gulwani, and Jeffrey S. Foster. From program verification to program synthesis. *ACM SIGPLAN Notices*, 45(1):313–326, January 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Vechev:2010:AGS

[28] Martin Vechev, Eran Yahav, and Greta Yorsh. Abstraction-guided synthesis of synchronization. *ACM SIGPLAN Notices*, 45(1):327–338, January 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Bodik:2010:PAN

[29] Rastislav Bodik, Satish Chandra, Joel Galenson, Doug Kimelman, Nicholas Tung, Shaon Barman, and Casey Rodarmor. Programming with angelic nondeterminism. *ACM SIGPLAN Notices*, 45(1):339–352, January 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Greenberg:2010:CMM

[30] Michael Greenberg, Benjamin C. Pierce, and Stephanie Weirich. Con-

tracts made manifest. *ACM SIGPLAN Notices*, 45(1):353–364, January 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Siek:2010:TB

[31] Jeremy G. Siek and Philip Wadler. Threesomes, with and without blame. *ACM SIGPLAN Notices*, 45(1):365–376, January 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Wrigstad:2010:ITU

[32] Tobias Wrigstad, Francesco Zappa Nardelli, Sylvain Lebresne, Johan Östlund, and Jan Vitek. Integrating typed and untyped code in a scripting language. *ACM SIGPLAN Notices*, 45(1):377–388, January 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Tate:2010:GCO

[33] Ross Tate, Michael Stepp, and Sorin Lerner. Generating compiler optimizations from proofs. *ACM SIGPLAN Notices*, 45(1):389–402, January 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Dias:2010:AGI

[34] João Dias and Norman Ramsey. Automatically generating instruction selectors using declarative machine descriptions. *ACM SIGPLAN Notices*, 45(1): 403–416, January 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Jim:2010:SAD

[35] Trevor Jim, Yitzhak Mandelbaum, and David Walker. Semantics and algorithms for data-dependent grammars. *ACM SIGPLAN Notices*, 45(1):417–430, January 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Broberg:2010:PRB

[36] Niklas Broberg and David Sands. Paralocks: role-based information flow control and beyond. *ACM SIGPLAN Notices*, 45(1):431–444, January 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Bhargavan:2010:MVS

[37] Karthikeyan Bhargavan, Cédric Fournet, and Andrew D. Gordon. Modular verification of security protocol code by typing. *ACM SIGPLAN Notices*, 45(1): 445–456, January 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Martin:2010:DCO

[38] Jean-Phillipe Martin, Michael Hicks, Manuel Costa, Periklis Akritidis, and Miguel Castro. Dynamically checking ownership policies in concurrent C/C++ programs. *ACM SIGPLAN Notices*, 45(1):457–470, January 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Heizmann:2010:NI

[39] Matthias Heizmann, Jochen Hoenicke, and Andreas Podelski. Nested interpolants. *ACM SIGPLAN Notices*, 45

(1):471–482, January 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Filinski:2010:MA

[40] Andrzej Filinski. Monads in action. *ACM SIGPLAN Notices*, 45(1):483–494, January 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Kobayashi:2010:HOM

[41] Naoki Kobayashi, Naoshi Tabuchi, and Hiroshi Unno. Higher-order multi-parameter tree transducers and recursion schemes for program verification. *ACM SIGPLAN Notices*, 45(1):495–508, January 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Nikhil:2010:UGP

[42] Rishiyur S. Nikhil. Using GPCE principles for hardware systems and accelerators: (bridging the gap to HW design). *ACM SIGPLAN Notices*, 45 (2):1–2, February 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Cordy:2010:EOO

[43] James R. Cordy. Eating our own dog food: DSLs for generative and transformational engineering. *ACM SIGPLAN Notices*, 45(2):3–4, February 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Willcock:2010:RGP

[44] Jeremiah James Willcock, Andrew Lumsdaine, and Daniel J. Quinlan. Reusable, generic program analyses and transformations. *ACM SIGPLAN Notices*, 45(2):5–14, February 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Bagge:2010:ASB

[45] Anya Helene Bagge, Valentin David, and Magne Haveraaen. The axioms strike back: testing with concepts and axioms in C++. *ACM SIGPLAN Notices*, 45(2):15–24, February 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Garcia:2010:TFT

[46] Ronald Garcia and Andrew Lumsdaine. Toward foundations for type-reflective metaprogramming. *ACM SIGPLAN Notices*, 45(2):25–34, February 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Sadat-Mohtasham:2010:TPD

[47] Hossein Sadat-Mohtasham and H. James Hoover. Transactional pointcuts: designation reification and advice of interrelated join points. *ACM SIGPLAN Notices*, 45(2):35–44, February 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Akai:2010:EAS

[48] Shumpei Akai and Shigeru Chiba. Extending AspectJ for separating regions. *ACM SIGPLAN Notices*, 45(2): 45–54, February 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Liu:2010:LFI

[49] Yanhong A. Liu, Michael Gorbovitski, and Scott D. Stoller. A language and framework for invariant-driven transformations. *ACM SIGPLAN Notices*, 45(2):55–64, February 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Wehr:2010:JBP

[50] Stefan Wehr and Peter Thiemann. JavaGI in the battlefield: practical experience with generalized interfaces. *ACM SIGPLAN Notices*, 45(2):65–74, February 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

McGachey:2010:CJC

[51] Phil McGachey, Antony L. Hosking, and J. Eliot B. Moss. Classifying Java class transformations for pervasive virtualized access. *ACM SIGPLAN Notices*, 45(2):75–84, February 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Villazon:2010:ARA

[52] Alex Villazón, Walter Binder, Danilo Ansaloni, and Philippe Moret. Advanced runtime adaptation for Java. *ACM SIGPLAN Notices*, 45(2):85–94, February 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Villazon:2010:HCA

[53] Alex Villazón, Walter Binder, Danilo Ansaloni, and Philippe Moret. HotWave: creating adaptive tools with dynamic aspect-oriented programming in Java. *ACM SIGPLAN Notices*, 45(2):95–98, February 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Heidenreich:2010:GST

[54] Florian Heidenreich, Jendrik Johannes, Mirko Seifert, Christian Wende, and Marcel Böhme. Generating safe template languages. *ACM SIGPLAN Notices*, 45(2):99–108, February 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Kong:2010:APT

[55] Soonho Kong, Wontae Choi, and Kwangkeun Yi. Abstract parsing for two-staged languages with concatenation. *ACM SIGPLAN Notices*, 45(2):109–116, February 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Nedunuri:2010:SFP

[56] Srinivas Nedunuri and William R. Cook. Synthesis of fast programs for maximum segment sum problems. *ACM SIGPLAN Notices*, 45(2):117–126, February 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Radermacher:2010:GEI

[57] Ansgar Radermacher, Arnaud Cuccuru, Sebastien Gerard, and François Terrier. Generating execution infrastructures for component-oriented specifications with a model driven toolchain: a case study for MARTE's GCM and real-time annotations. *ACM SIGPLAN Notices*, 45(2):127–136, February 2010. CODEN SINODQ. ISSN 0362-1340

(print), 1523-2867 (print), 1558-1160 (electronic).

Cassou:2010:GPA

[58] Damien Cassou, Benjamin Bertran, Nicolas Loriant, and Charles Consel. A generative programming approach to developing pervasive computing systems. *ACM SIGPLAN Notices*, 45(2): 137–146, February 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Jarvi:2010:AUI

[59] Jaakko Järvi, Mat Marcus, Sean Parent, John Freeman, and Jacob Smith. Algorithms for user interfaces. *ACM SIGPLAN Notices*, 45(2):147–156, February 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Kastner:2010:MRP

[60] Christian Kästner, Sven Apel, and Martin Kuhlemann. A model of refactoring physically and virtually separated features. *ACM SIGPLAN Notices*, 45(2):157–166, February 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Sanen:2010:MPS

[61] Frans Sanen, Eddy Truyen, and Wouter Joosen. Mapping problem-space to solution-space features: a feature interaction approach. *ACM SIGPLAN Notices*, 45(2):167–176, February 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Kuhlemann:2010:SCN

[62] Martin Kuhlemann, Don Batory, and Christian Kästner. Safe composition of non-monotonic features. *ACM SIGPLAN Notices*, 45(2):177–186, February 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Brewer:2010:TDR

[63] Eric A. Brewer. Technology for developing regions: Moore's law is not enough. *ACM SIGPLAN Notices*, 45 (3):1–2, March 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Ipek:2010:DRM

[64] Engin Ipek, Jeremy Condit, Edmund B. Nightingale, Doug Burger, and Thomas Moscibroda. Dynamically replicated memory: building reliable systems from nanoscale resistive memories. *ACM SIGPLAN Notices*, 45 (3):3–14, March 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Kirman:2010:PEA

[65] Nevin Kirman and José F. Martínez. A power-efficient all-optical on-chip interconnect using wavelength-based oblivious routing. *ACM SIGPLAN Notices*, 45(3):15–28, March 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Neelakantam:2010:RSE

[66] Naveen Neelakantam, David R. Ditzel, and Craig Zilles. A real system evaluation of hardware atomicity for software

speculation. *ACM SIGPLAN Notices*, 45(3):29–38, March 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Harris:2010:DFM

[67] Tim Harris, Saša Tomic, Adrián Cristal, and Osman Unsal. Dynamic filtering: multi-purpose architecture support for language runtime systems. *ACM SIGPLAN Notices*, 45(3):39–52, March 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Bergan:2010:CCR

[68] Tom Bergan, Owen Anderson, Joseph Devietti, Luis Ceze, and Dan Grossman. CoreDet: a compiler and runtime system for deterministic multithreaded execution. *ACM SIGPLAN Notices*, 45 (3):53–64, March 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Raman:2010:SPU

[69] Arun Raman, Hanjun Kim, Thomas R. Mason, Thomas B. Jablin, and David I. August. Speculative parallelization using software multi-threaded transactions. *ACM SIGPLAN Notices*, 45 (3):65–76, March 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Lee:2010:REO

[70] Dongyoon Lee, Benjamin Wester, Kaushik Veeraraghavan, Satish Narayanasamy, Peter M. Chen, and Jason Flinn. Respec: efficient online multiprocessor replay via speculation and external determinism. *ACM SIGPLAN Notices*, 45 (3):77–90, March 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Eyerman:2010:PJS

[71] Stijn Eyerman and Lieven Eeckhout. Probabilistic job symbiosis modeling for SMT processor scheduling. *ACM SIGPLAN Notices*, 45(3):91–102, March 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Shen:2010:RBV

[72] Kai Shen. Request behavior variations. *ACM SIGPLAN Notices*, 45(3): 103–116, March 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Johnson:2010:DCM

[73] F. Ryan Johnson, Radu Stoica, Anastasia Ailamaki, and Todd C. Mowry. Decoupling contention management from scheduling. *ACM SIGPLAN Notices*, 45(3):117–128, March 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Zhuravlev:2010:ASR

[74] Sergey Zhuravlev, Sergey Blagodurov, and Alexandra Fedorova. Addressing shared resource contention in multicore processors via scheduling. *ACM SIGPLAN Notices*, 45(3):129–142, March 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Yuan:2010:SED

[75] Ding Yuan, Haohui Mai, Weiwei Xiong, Lin Tan, Yuanyuan Zhou, and Shankar

Pasupathy. SherLog: error diagnosis by connecting clues from run-time logs. *ACM SIGPLAN Notices*, 45(3): 143–154, March 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Weeratunge:2010:AMD

[76] Dasarath Weeratunge, Xiangyu Zhang, and Suresh Jagannathan. Analyzing multicore dumps to facilitate concurrency bug reproduction. *ACM SIGPLAN Notices*, 45(3):155–166, March 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Burckhardt:2010:RSP

[77] Sebastian Burckhardt, Pravesh Kothari, Madanlal Musuvathi, and Santosh Nagarakatte. A randomized scheduler with probabilistic guarantees of finding bugs. *ACM SIGPLAN Notices*, 45(3): 167–178, March 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Zhang:2010:CDS

[78] Wei Zhang, Chong Sun, and Shan Lu. ConMem: detecting severe concurrency bugs through an effect-oriented approach. *ACM SIGPLAN Notices*, 45(3):179–192, March 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Mesa-Martinez:2010:CPT

[79] Francisco Javier Mesa-Martinez, Ehsan K. Ardestani, and Jose Renau. Characterizing processor thermal behavior. *ACM SIGPLAN Notices*, 45(3): 193–204, March 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Venkatesh:2010:CCR

[80] Ganesh Venkatesh, Jack Sampson, Nathan Goulding, Saturnino Garcia, Vladyslav Bryksin, Jose Lugo-Martinez, Steven Swanson, and Michael Bedford Taylor. Conservation cores: reducing the energy of mature computations. *ACM SIGPLAN Notices*, 45(3):205–218, March 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Sudan:2010:MPI

[81] Kshitij Sudan, Niladrish Chatterjee, David Nellans, Manu Awasthi, Rajeev Balasubramonian, and Al Davis. Micro-pages: increasing DRAM efficiency with locality-aware data placement. *ACM SIGPLAN Notices*, 45(3): 219–230, March 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Pelley:2010:PRD

[82] Steven Pelley, David Meisner, Pooya Zandevakili, Thomas F. Wenisch, and Jack Underwood. Power routing: dynamic power provisioning in the data center. *ACM SIGPLAN Notices*, 45(3): 231–242, March 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Ahmad:2010:JOI

[83] Faraz Ahmad and T. N. Vijaykumar. Joint optimization of idle and cooling power in data centers while maintaining response time. *ACM SIGPLAN*

Notices, 45(3):243–256, March 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Goodstein:2010:BAA

[84] Michelle L. Goodstein, Evangelos Vlachos, Shimin Chen, Phillip B. Gibbons, Michael A. Kozuch, and Todd C. Mowry. Butterfly analysis: adapting dataflow analysis to dynamic parallel monitoring. *ACM SIGPLAN Notices*, 45(3):257–270, March 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Vlachos:2010:PEA

[85] Evangelos Vlachos, Michelle L. Goodstein, Michael A. Kozuch, Shimin Chen, Babak Falsafi, Phillip B. Gibbons, and Todd C. Mowry. ParaLog: enabling and accelerating online parallel monitoring of multithreaded applications. *ACM SIGPLAN Notices*, 45(3):271–284, March 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Hormati:2010:MMS

[86] Amir H. Hormati, Yoonseo Choi, Mark Woh, Manjunath Kudlur, Rodric Rabbah, Trevor Mudge, and Scott Mahlke. MacroSS: macro-SIMDization of streaming applications. *ACM SIGPLAN Notices*, 45(3):285–296, March 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Woo:2010:CPD

[87] Dong Hyuk Woo and Hsien-Hsin S. Lee. COMPASS: a programmable data prefetcher using idle GPU shaders. *ACM SIGPLAN Notices*, 45(3):297–310, March 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Sanchez:2010:FAS

[88] Daniel Sanchez, Richard M. Yoo, and Christos Kozyrakis. Flexible architectural support for fine-grain scheduling. *ACM SIGPLAN Notices*, 45(3): 311–322, March 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Romanescu:2010:SDV

[89] Bogdan F. Romanescu, Alvin R. Lebeck, and Daniel J. Sorin. Specifying and dynamically verifying address translation-aware memory consistency. *ACM SIGPLAN Notices*, 45(3): 323–334, March 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Ebrahimi:2010:FST

[90] Eiman Ebrahimi, Chang Joo Lee, Onur Mutlu, and Yale N. Patt. Fairness via source throttling: a configurable and high-performance fairness substrate for multi-core memory systems. *ACM SIGPLAN Notices*, 45(3): 335–346, March 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Gelado:2010:ADS

[91] Isaac Gelado, Javier Cabezas, Nacho Navarro, John E. Stone, Sanjay Patel, and Wen mei W. Hwu. An

asymmetric distributed shared memory model for heterogeneous parallel systems. *ACM SIGPLAN Notices*, 45(3): 347–358, March 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Bhattacharjee:2010:ICC

[92] Abhishek Bhattacharjee and Margaret Martonosi. Inter-core cooperative TLB for chip multiprocessors. *ACM SIGPLAN Notices*, 45(3):359–370, March 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Huang:2010:OES

[93] Ruirui Huang, Daniel Y. Deng, and G. Edward Suh. Orthrus: efficient software integrity protection on multicores. *ACM SIGPLAN Notices*, 45(3): 371–384, March 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Feng:2010:SPS

[94] Shuguang Feng, Shantanu Gupta, Amin Ansari, and Scott Mahlke. Shoestring: probabilistic soft error reliability on the cheap. *ACM SIGPLAN Notices*, 45(3):385–396, March 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Yoon:2010:VFE

[95] Doe Hyun Yoon and Mattan Erez. Virtualized and flexible ECC for main memory. *ACM SIGPLAN Notices*, 45 (3):397–408, March 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Li:2010:AAB

[96] Minming Li, Chun Jason Xue, Tiantian Liu, and Yingchao Zhao. Analysis and approximation for bank selection instruction minimization on partitioned memory architecture. *ACM SIGPLAN Notices*, 45(4):1–8, April 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Pyka:2010:VSL

[97] Robert Pyka, Felipe Klein, Peter Marwedel, and Stylianos Mamagkakis. Versatile system-level memory-aware platform description approach for embedded MPSoCs. *ACM SIGPLAN Notices*, 45(4):9–16, April 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Kim:2010:ODM

[98] Yongjoo Kim, Jongeun Lee, Aviral Shrivastava, and Yunheung Paek. Operation and data mapping for CGRAs with multi-bank memory. *ACM SIGPLAN Notices*, 45(4):17–26, April 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Foroozannejad:2010:LDB

[99] Mohammad H. Foroozannejad, Matin Hashemi, Trevor L. Hodges, and Soheil Ghiasi. Look into details: the benefits of fine-grain streaming buffer analysis. *ACM SIGPLAN Notices*, 45 (4):27–36, April 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Perathoner:2010:MSE

[100] Simon Perathoner, Tobias Rein, Lothar Thiele, Kai Lampka, and Jonas Rox. Modeling structured event streams in system level performance analysis. *ACM SIGPLAN Notices*, 45(4):37–46, April 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Brandt:2010:TCA

[101] Jens Brandt, Klaus Schneider, and Sandeep K. Shukla. Translating concurrent action oriented specifications to synchronous guarded actions. *ACM SIGPLAN Notices*, 45(4):47–56, April 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Delaval:2010:CMD

[102] Gwenaël Delaval, Hervé Marchand, and Eric Rutten. Contracts for modular discrete controller synthesis. *ACM SIGPLAN Notices*, 45(4):57–66, April 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Schlickling:2010:SAD

[103] Marc Schlickling and Markus Pister. Semi-automatic derivation of timing models for WCET analysis. *ACM SIGPLAN Notices*, 45(4):67–76, April 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Viskic:2010:DEA

[104] Ines Viskic, Lochi Yu, and Daniel Gajski. Design exploration and automatic generation of MPSoC platform TLMs from Kahn Process Network applications. *ACM SIGPLAN Notices*, 45 (4):77–84, April 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Ozturk:2010:CDN

[105] Ozcan Ozturk, Mahmut Kandemir, Mary J. Irwin, and Sri H. K. Narayanan. Compiler directed network-on-chip reliability enhancement for chip multiprocessors. *ACM SIGPLAN Notices*, 45(4):85–94, April 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Kulkarni:2010:IBP

[106] Prasad A. Kulkarni, Michael R. Jantz, and David B. Whalley. Improving both the performance benefits and speed of optimization phase sequence searches. *ACM SIGPLAN Notices*, 45(4):95–104, April 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Li:2010:ECU

[107] Weijia Li and Youtao Zhang. An efficient code update scheme for DSP applications in mobile embedded systems. *ACM SIGPLAN Notices*, 45(4): 105–114, April 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Wernsing:2010:ECF

[108] John Robert Wernsing and Greg Stitt. Elastic computing: a framework for transparent, portable, and adaptive multi-core heterogeneous computing. *ACM SIGPLAN Notices*, 45(4):115–124, April 2010. CODEN SIN-

ODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Biehl:2010:ISA

[109] Matthias Biehl, Chen DeJiu, and Martin Törngren. Integrating safety analysis into the model-based development toolchain of automotive embedded systems. *ACM SIGPLAN Notices*, 45(4): 125–132, April 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Fischmeister:2010:SBP

[110] Sebastian Fischmeister and Yanmeng Ba. Sampling-based program execution monitoring. *ACM SIGPLAN Notices*, 45(4):133–142, April 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Shrivastava:2010:CVE

[111] Aviral Shrivastava, Jongeun Lee, and Reiley Jeyapaul. Cache vulnerability equations for protecting data in embedded processor caches from soft errors. *ACM SIGPLAN Notices*, 45(4): 143–152, April 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Altmeyer:2010:RAT

[112] Sebastian Altmeyer, Claire Maiza, and Jan Reineke. Resilience analysis: tightening the CRPD bound for set-associative caches. *ACM SIGPLAN Notices*, 45(4):153–162, April 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Wang:2010:RRA

[113] Yi Wang, Duo Liu, Meng Wang, Zhiwei Qin, Zili Shao, and Yong Guan. RNFTL: a reuse-aware NAND flash translation layer for flash memory. *ACM SIGPLAN Notices*, 45(4): 163–172, April 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Agerwala:2010:ECC

[114] Tilak Agerwala. Exascale computing: the challenges and opportunities in the next decade. *ACM SIGPLAN Notices*, 45(5):1–2, May 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Mendez-Lojo:2010:SDO

[115] Mario Méndez-Lojo, Donald Nguyen, Dimitrios Prountzos, Xin Sui, M. Amber Hassaan, Milind Kulkarni, Martin Burtscher, and Keshav Pingali. Structure-driven optimizations for amorphous data-parallel programs. *ACM SIGPLAN Notices*, 45(5):3–14, May 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Coons:2010:GEU

[116] Katherine E. Coons, Sebastian Burckhardt, and Madanlal Musuvathi. GAMBIT: effective unit testing for concurrency libraries. *ACM SIGPLAN Notices*, 45(5):15–24, May 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Lee:2010:FXC

[117] Jonathan K. Lee and Jens Palsberg. Featherweight X10: a core calculus for

async-finish parallelism. *ACM SIGPLAN Notices*, 45(5):25–36, May 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Mannarswamy:2010:CAS

[118] Sandya Mannarswamy, Dhruva R. Chakrabarti, Kaushik Rajan, and Sujoy Saraswati. Compiler aided selective lock assignment for improving the performance of software transactional memory. *ACM SIGPLAN Notices*, 45 (5):37–46, May 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Rossbach:2010:TPA

[119] Christopher J. Rossbach, Owen S. Hofmann, and Emmett Witchel. Is transactional programming actually easier? *ACM SIGPLAN Notices*, 45(5):47–56, May 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Zyulkyarov:2010:DPU

[120] Ferad Zyulkyarov, Tim Harris, Osman S. Unsal, Adrían Cristal, and Mateo Valero. Debugging programs that use atomic blocks and transactional memory. *ACM SIGPLAN Notices*, 45 (5):57–66, May 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Dalessandro:2010:NSS

[121] Luke Dalessandro, Michael F. Spear, and Michael L. Scott. NOrec: streamlining STM by abolishing ownership records. *ACM SIGPLAN Notices*, 45 (5):67–78, May 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Maldonado:2010:SST

[122] Walther Maldonado, Patrick Marlier, Pascal Felber, Adi Suissa, Danny Hendler, Alexandra Fedorova, Julia L. Lawall, and Gilles Muller. Scheduling support for transactional memory contention management. *ACM SIGPLAN Notices*, 45(5):79–90, May 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Barreto:2010:LPN

[123] João Barreto, Aleksandar Dragojević, Paulo Ferreira, Rachid Guerraoui, and Michal Kapalka. Leveraging parallel nesting in transactional memory. *ACM SIGPLAN Notices*, 45(5):91–100, May 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Torrellas:2010:ESC

[124] Josep Torrellas, Bill Gropp, Jaime Moreno, Kunle Olukotun, and Vivek Sarkar. Extreme scale computing: challenges and opportunities. *ACM SIGPLAN Notices*, 45(5):101–102, May 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Arvind:2010:HI

[125] Arvind. Is hardware innovation over? *ACM SIGPLAN Notices*, 45(5):103–104, May 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Baghsorkhi:2010:APM

[126] Sara S. Baghsorkhi, Matthieu Delahaye, Sanjay J. Patel, William D. Gropp, and Wen mei W. Hwu. An adaptive performance modeling tool for GPU architectures. *ACM SIGPLAN Notices*, 45(5):105–114, May 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Choi:2010:MDA

[127] Jee W. Choi, Amik Singh, and Richard W. Vuduc. Model-driven autotuning of sparse matrix-vector multiply on GPUs. *ACM SIGPLAN Notices*, 45 (5):115–126, May 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Zhang:2010:FTS

[128] Yao Zhang, Jonathan Cohen, and John D. Owens. Fast tridiagonal solvers on the GPU. *ACM SIGPLAN Notices*, 45(5):127–136, May 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Sandes:2010:CUG

[129] Edans Flavius O. Sandes and Alba Cristina M. A. de Melo. CUDAlign: using GPU to accelerate the comparison of megabase genomic sequences. *ACM SIGPLAN Notices*, 45 (5):137–146, May 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Hofmeyr:2010:LBS

[130] Steven Hofmeyr, Costin Iancu, and Filip Blagojević. Load balancing on speed. *ACM SIGPLAN Notices*, 45 (5):147–158, May 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Hoefler:2010:SCP

[131] Torsten Hoefler, Christian Siebert, and Andrew Lumsdaine. Scalable communication protocols for dynamic sparse data exchange. *ACM SIGPLAN Notices*, 45(5):159–168, May 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Romein:2010:LCI

[132] John W. Romein, P. Chris Broekema, Jan David Mol, and Rob V. van Nieuwpoort. The LOFAR correlator: implementation and performance analysis. *ACM SIGPLAN Notices*, 45(5): 169–178, May 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Tzannes:2010:LBS

[133] Alexandros Tzannes, George C. Caragea, Rajeev Barua, and Uzi Vishkin. Lazy binary-splitting: a run-time adaptive work-stealing scheduler. *ACM SIGPLAN Notices*, 45(5): 179–190, May 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Radojkovic:2010:TSB

[134] Petar Radojković, Vladimir Čakarević, Javier Verdú, Alex Pajuelo, Francisco J. Cazorla, Mario Nemirovsky, and Mateo Valero. Thread to strand binding of parallel network applications in massive multi-threaded systems. *ACM SIGPLAN Notices*, 45(5):

191–202, May 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Zhang:2010:DCS

[135] Eddy Z. Zhang, Yunlian Jiang, and Xipeng Shen. Does cache sharing on modern CMP matter to the performance of contemporary multithreaded programs? *ACM SIGPLAN Notices*, 45(5):203–212, May 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Liu:2010:IPL

[136] Lixia Liu and Zhiyuan Li. Improving parallelism and locality with asynchronous algorithms. *ACM SIGPLAN Notices*, 45(5):213–222, May 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Castaldo:2010:SLP

[137] Anthony M. Castaldo and R. Clint Whaley. Scaling LAPACK panel operations using parallel cache assignment. *ACM SIGPLAN Notices*, 45 (5):223–232, May 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Sutherland:2010:CTC

[138] Dean F. Sutherland and William L. Scherlis. Composable thread coloring. *ACM SIGPLAN Notices*, 45(5): 233–244, May 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Agrawal:2010:HLF

[139] Kunal Agrawal, Charles E. Leiserson, and Jim Sukha. Helper locks for fork-join parallel programming. *ACM SIGPLAN Notices*, 45(5):245–256, May 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Bronson:2010:PCB

[140] Nathan G. Bronson, Jared Casper, Hassan Chafi, and Kunle Olukotun. A practical concurrent binary search tree. *ACM SIGPLAN Notices*, 45(5): 257–268, May 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Tallent:2010:ALC

[141] Nathan R. Tallent, John M. Mellor-Crummey, and Allan Porterfield. Analyzing lock contention in multithreaded applications. *ACM SIGPLAN Notices*, 45(5):269–280, May 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Upadhyaya:2010:UDS

[142] Gautam Upadhyaya, Samuel P. Midkiff, and Vijay S. Pai. Using data structure knowledge for efficient lock generation and strong atomicity. *ACM SIGPLAN Notices*, 45(5):281–292, May 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Ali:2010:MAC

[143] Qasim Ali, Samuel Pratt Midkiff, and Vijay S. Pai. Modeling advanced collective communication algorithms

on Cell-based systems. *ACM SIGPLAN Notices*, 45(5):293–304, May 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Zhai:2010:PPP

[144] Jidong Zhai, Wenguang Chen, and Weimin Zheng. PHANTOM: predicting performance of parallel applications on large-scale parallel machines using a single node. *ACM SIGPLAN Notices*, 45(5):305–314, May 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Aleen:2010:IDD

[145] Farhana Aleen, Monirul Sharif, and Santosh Pande. Input-driven dynamic execution prediction of streaming applications. *ACM SIGPLAN Notices*, 45 (5):315–324, May 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Lupei:2010:TST

[146] Daniel Lupei, Bogdan Simion, Don Pinto, Matthew Misler, Mihai Burcea, William Krick, and Cristiana Amza. Towards scalable and transparent parallelization of multiplayer games using transactional memory support. *ACM SIGPLAN Notices*, 45(5):325–326, May 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Perarnau:2010:KRC

[147] Swann Perarnau and Guillaume Huard. KRASH: reproducible CPU load generation on many cores machines. *ACM SIGPLAN Notices*, 45(5):327–328, May 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Muralidhara:2010:IAS

[148] Sai Prashanth Muralidhara, Mahmut Kandemir, and Padma Raghavan. Intra-application shared cache partitioning for multithreaded applications. *ACM SIGPLAN Notices*, 45 (5):329–330, May 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Dash:2010:SPT

[149] Alokika Dash and Brian Demsky. Symbolic prefetching in transactional distributed shared memory. *ACM SIGPLAN Notices*, 45(5):331–332, May 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Chakrabarti:2010:NAE

[150] Dhruva R. Chakrabarti. New abstractions for effective performance analysis of STM programs. *ACM SIGPLAN Notices*, 45(5):333–334, May 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Zhang:2010:CSP

[151] Chao Zhang, Chen Ding, Xiaoming Gu, Kirk Kelsey, Tongxin Bai, and Xiaobing Feng. Continuous speculative program parallelization in software. *ACM SIGPLAN Notices*, 45(5): 335–336, May 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Marjanovic:2010:ECC

[152] Vladimir Marjanovic, Jesús Labarta, Eduard Ayguadé, and Mateo Valero. Effective communication and computation overlap with hybrid MPI/SMPSs. *ACM SIGPLAN Notices*, 45(5):337–338, May 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Cederman:2010:SLF

[153] Daniel Cederman and Philippas Tsigas. Supporting lock-free composition of concurrent data objects. *ACM SIGPLAN Notices*, 45(5):339–340, May 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Guo:2010:SSL

[154] Yi Guo, Jisheng Zhao, Vincent Cave, and Vivek Sarkar. SLAW: a scalable locality-aware adaptive work-stealing scheduler for multi-core systems. *ACM SIGPLAN Notices*, 45 (5):341–342, May 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Yang:2010:OCG

[155] Yi Yang, Ping Xiang, Jingfei Kong, and Huiyang Zhou. An optimizing compiler for GPGPU programs with input-data sharing. *ACM SIGPLAN Notices*, 45 (5):343–344, May 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Chandramowlishwaran:2010:ACC

[156] Aparna Chandramowlishwaran, Kathleen Knobe, and Richard Vuduc. Applying the concurrent collections programming model to asynchronous parallel dense linear algebra. *ACM SIGPLAN Notices*, 45(5):345–346, May 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Hoffmann:2010:AHS

[157] Henry Hoffmann, Jonathan Eastep, Marco D. Santambrogio, Jason E. Miller, and Anant Agarwal. Application heartbeats for software performance and health. *ACM SIGPLAN Notices*, 45(5):347–348, May 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Porter:2010:MTM

[158] Donald E. Porter and Emmett Witchel. Modeling transactional memory workload performance. *ACM SIGPLAN Notices*, 45(5):349–350, May 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Carter:2010:PLN

[159] John D. Carter, William B. Gardner, and Gary Grewal. The Pilot library for novice MPI programmers. *ACM SIGPLAN Notices*, 45(5):351–352, May 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Jang:2010:DTE

[160] Byunghyun Jang, Perhaad Mistry, Dana Schaa, Rodrigo Dominguez, and David Kaeli. Data transformations enabling loop vectorization on multithreaded data parallel architectures.

ACM SIGPLAN Notices, 45(5):353–354, May 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Buehrer:2010:DPS

[161] Gregory Buehrer, Srinivasan Parthasarathy, and Shirish Tatikonda. A distributed placement service for graph-structured and tree-structured data. *ACM SIGPLAN Notices*, 45(5):355–356, May 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Li:2010:SVC

[162] Guodong Li, Ganesh Gopalakrishnan, Robert M. Kirby, and Dan Quinlan. A symbolic verifier for CUDA programs. *ACM SIGPLAN Notices*, 45 (5):357–358, May 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Richards:2010:ADB

[163] Gregor Richards, Sylvain Lebresne, Brian Burg, and Jan Vitek. An analysis of the dynamic behavior of JavaScript programs. *ACM SIGPLAN Notices*, 45(6):1–12, June 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Bond:2010:BEC

[164] Michael D. Bond, Graham Z. Baker, and Samuel Z. Guyer. Breadcrumbs: efficient context sensitivity for dynamic bug detection analyses. *ACM SIGPLAN Notices*, 45(6):13–24, June 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Ruwase:2010:DLE

[165] Olatunji Ruwase, Shimin Chen, Phillip B. Gibbons, and Todd C. Mowry. Decoupled lifeguards: enabling path optimizations for dynamic correctness checking tools. *ACM SIGPLAN Notices*, 45(6):25–35, June 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Lee:2010:JSD

[166] Byeongcheol Lee, Ben Wiedermann, Martin Hirzel, Robert Grimm, and Kathryn S. McKinley. Jinn: synthesizing dynamic bug detectors for foreign language interfaces. *ACM SIGPLAN Notices*, 45(6):36–49, June 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Prabhu:2010:SPS

[167] Prakash Prabhu, Ganesan Ramalingam, and Kapil Vaswani. Safe programmable speculative parallelism. *ACM SIGPLAN Notices*, 45(6):50–61, June 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Tian:2010:SSP

[168] Chen Tian, Min Feng, and Rajiv Gupta. Supporting speculative parallelization in the presence of dynamic data structures. *ACM SIGPLAN Notices*, 45(6):62–73, June 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Kandemir:2010:CTA

[169] Mahmut Kandemir, Taylan Yemliha, SaiPrashanth Muralidhara, Shekhar Srikantaiah, Mary Jane Irwin, and Yuanrui Zhnag. Cache topology aware computation mapping for multicores. *ACM SIGPLAN Notices*, 45(6):74–85, June 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Yang:2010:GCM

[170] Yi Yang, Ping Xiang, Jingfei Kong, and Huiyang Zhou. A GPGPU compiler for memory optimization and parallelism management. *ACM SIGPLAN Notices*, 45(6):86–97, June 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Eggers:2010:AL

[171] Susan Eggers. 2010 Athena lecture. *ACM SIGPLAN Notices*, 45 (6):98, June 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Yang:2010:SLI

[172] Jean Yang and Chris Hawblitzel. Safe to the last instruction: automated verification of a type-safe operating system. *ACM SIGPLAN Notices*, 45(6):99–110, June 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Tatlock:2010:BEV

[173] Zachary Tatlock and Sorin Lerner. Bringing extensibility to verified compilers. *ACM SIGPLAN Notices*, 45 (6):111–121, June 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Chlipala:2010:UST

[174] Adam Chlipala. Ur: statically-typed metaprogramming with type-level record computation. *ACM SIGPLAN Notices*, 45(6):122–133, June 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Emmi:2010:PVT

[175] Michael Emmi, Rupak Majumdar, and Roman Manevich. Parameterized verification of transactional memories. *ACM SIGPLAN Notices*, 45(6): 134–145, June 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Pizlo:2010:SFT

[176] Filip Pizlo, Lukasz Ziarek, Petr Maj, Antony L. Hosking, Ethan Blanton, and Jan Vitek. SCHISM: fragmentation-tolerant real-time garbage collection. *ACM SIGPLAN Notices*, 45 (6):146–159, June 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Xu:2010:DIU

[177] Guoqing Xu and Atanas Rountev. Detecting inefficiently-used containers to avoid bloat. *ACM SIGPLAN Notices*, 45(6):160–173, June 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Xu:2010:FLU

[178] Guoqing Xu, Nick Mitchell, Matthew Arnold, Atanas Rountev, Edith Schonberg, and Gary Sevitsky. Finding low-utility data structures. *ACM SIGPLAN Notices*, 45(6):174–186, June

2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Mytkowicz:2010:EAJ

[179] Todd Mytkowicz, Amer Diwan, Matthias Hauswirth, and Peter F. Sweeney. Evaluating the accuracy of Java profilers. *ACM SIGPLAN Notices*, 45(6):187–197, June 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Baek:2010:GFS

[180] Woongki Baek and Trishul M. Chilimbi. Green: a framework for supporting energy-conscious programming using controlled approximation. *ACM SIGPLAN Notices*, 45(6):198–209, June 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Rajan:2010:GPM

[181] Kaushik Rajan, Sriram Rajamani, and Shashank Yaduvanshi. GUESSTIMATE: a programming model for collaborative distributed systems. *ACM SIGPLAN Notices*, 45(6):210–220, June 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Xi:2010:CFM

[182] Qian Xi and David Walker. A context-free markup language for semi-structured text. *ACM SIGPLAN Notices*, 45(6):221–232, June 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Loitsch:2010:PFP

[183] Florian Loitsch. Printing floating-point numbers quickly and accurately with integers. *ACM SIGPLAN Notices*, 45 (6):233–243, June 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Flanagan:2010:AMD

[184] Cormac Flanagan and Stephen N. Freund. Adversarial memory for detecting destructive races. *ACM SIGPLAN Notices*, 45(6):244–254, June 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Bond:2010:PPD

[185] Michael D. Bond, Katherine E. Coons, and Kathryn S. McKinley. PACER: proportional detection of data races. *ACM SIGPLAN Notices*, 45(6):255–268, June 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Nakaike:2010:LER

[186] Takuya Nakaike and Maged M. Michael. Lock elision for read-only critical sections in Java. *ACM SIGPLAN Notices*, 45(6):269–278, June 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Chaudhuri:2010:SI

[187] Swarat Chaudhuri and Armando Solar-Lezama. Smooth interpretation. *ACM SIGPLAN Notices*, 45(6):279–291, June 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Gulwani:2010:RBP

[188] Sumit Gulwani and Florian Zuleger. The reachability-bound problem. *ACM SIGPLAN Notices*, 45(6):292–304, June 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Might:2010:REC

[189] Matthew Might, Yannis Smaragdakis, and David Van Horn. Resolving and exploiting the k-CFA paradox: illuminating functional vs. object-oriented program analysis. *ACM SIGPLAN Notices*, 45(6):305–315, June 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Kuncak:2010:CFS

[190] Viktor Kuncak, Mikaël Mayer, Ruzica Piskac, and Philippe Suter. Complete functional synthesis. *ACM SIGPLAN Notices*, 45(6):316–329, June 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Burckhardt:2010:LCA

[191] Sebastian Burckhardt, Chris Dern, Madanlal Musuvathi, and Roy Tan. Line-Up: a complete and automatic linearizability checker. *ACM SIGPLAN Notices*, 45(6):330–340, June 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Torlak:2010:MCA

[192] Emina Torlak, Mandana Vaziri, and Julian Dolby. MemSAT: checking axiomatic specifications of memory models. *ACM SIGPLAN Notices*, 45(6):341–350, June 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Marino:2010:DSE

[193] Daniel Marino, Abhayendra Singh, Todd Millstein, Madanlal Musuvathi, and Satish Narayanasamy. DRFX: a simple and efficient memory model for concurrent programming languages. *ACM SIGPLAN Notices*, 45(6):351–362, June 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Chambers:2010:FEE

[194] Craig Chambers, Ashish Raniwala, Frances Perry, Stephen Adams, Robert R. Henry, Robert Bradshaw, and Nathan Weizenbaum. FlumeJava: easy, efficient data-parallel pipelines. *ACM SIGPLAN Notices*, 45(6):363–375, June 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Pan:2010:CPS

[195] Heidi Pan, Benjamin Hindman, and Krste Asanović. Composing parallel software efficiently with Lithe. *ACM SIGPLAN Notices*, 45(6):376–387, June 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Zhou:2010:BDC

[196] Jin Zhou and Brian Demsky. Bamboo: a data-centric, object-oriented approach to many-core software. *ACM SIGPLAN Notices*, 45(6):388–399, June 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Westbrook:2010:MJM

[197] Edwin Westbrook, Mathias Ricken, Jun Inoue, Yilong Yao, Tamer Abdelatif, and Walid Taha. Mint: Java multi-stage programming using weak separability. *ACM SIGPLAN Notices*, 45(6):400–411, June 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Chen:2010:TPC

[198] Juan Chen, Ravi Chugh, and Nikhil Swamy. Type-preserving compilation of end-to-end verification of security enforcement. *ACM SIGPLAN Notices*, 45(6):412–423, June 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Tate:2010:IOO

[199] Ross Tate, Juan Chen, and Chris Hawblitzel. Inferable object-oriented typed assembly language. *ACM SIGPLAN Notices*, 45(6):424–435, June 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Khoo:2010:MTC

[200] Yit Phang Khoo, Bor-Yuh Evan Chang, and Jeffrey S. Foster. Mixing type checking and symbolic execution. *ACM SIGPLAN Notices*, 45 (6):436–447, June 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Chen:2010:EIO

[201] Yang Chen, Yuanjie Huang, Lieven Eeckhout, Grigori Fursin, Liang Peng, Olivier Temam, and Chengyong Wu. Evaluating iterative optimization across 1000 datasets. *ACM SIGPLAN Notices*, 45(6):448–459, June 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Kamruzzaman:2010:SDS

[202] Md Kamruzzaman, Steven Swanson, and Dean M. Tullsen. Software data spreading: leveraging distributed caches to improve single thread performance. *ACM SIGPLAN Notices*, 45 (6):460–470, June 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Sartor:2010:ZRD

[203] Jennifer B. Sartor, Stephen M. Blackburn, Daniel Frampton, Martin Hirzel, and Kathryn S. McKinley. Z-rays: divide arrays and conquer speed and flexibility. *ACM SIGPLAN Notices*, 45 (6):471–482, June 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Acar:2010:TDT

[204] Umut A. Acar, Guy Blelloch, Ruy Ley-Wild, Kanat Tangwongsan, and Duru Turkoglu. Traceable data types for self-adjusting computation. *ACM SIGPLAN Notices*, 45(6):483–496, June 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Chen:2010:TTT

[205] Peter M. Chen. Transistors to toys: teaching systems to freshmen. *ACM SIGPLAN Notices*, 45(7):1–2, July

2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Pohle:2010:CWM

[206] Aaron Pohle, Björn Döbel, Michael Roitzsch, and Hermann Härtig. Capability wrangling made easy: debugging on a microkernel with `valgrind`. *ACM SIGPLAN Notices*, 45(7):3–12, July 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Chow:2010:MSR

[207] Jim Chow, Dominic Lucchetti, Tal Garfinkel, Geoffrey Lefebvre, Ryan Gardner, Joshua Mason, Sam Small, and Peter M. Chen. Multi-stage replay with Crosscut. *ACM SIGPLAN Notices*, 45(7):13–24, July 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Huang:2010:OCD

[208] Yijian Huang, Haibo Chen, and Binyu Zang. Optimizing crash dump in virtualized environments. *ACM SIGPLAN Notices*, 45(7):25–36, July 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Hunt:2010:LBS

[209] Galen C. Hunt. Looking beyond a singularity. *ACM SIGPLAN Notices*, 45 (7):37–38, July 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Titzer:2010:ICR

[210] Ben L. Titzer, Thomas Würthinger, Doug Simon, and Marcelo Cintra. Improving compiler-runtime separation with XIR. *ACM SIGPLAN Notices*, 45(7):39–50, July 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Geoffray:2010:VSM

[211] Nicolas Geoffray, Gaël Thomas, Julia Lawall, Gilles Muller, and Bertil Folliot. VMKit: a substrate for managed runtime environments. *ACM SIGPLAN Notices*, 45(7):51–62, July 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Zhang:2010:NSS

[212] Qing Zhang, John McCullough, Justin Ma, Nabil Schear, Michael Vrable, Amin Vahdat, Alex C. Snoeren, Geoffrey M. Voelker, and Stefan Savage. Neon: system support for derived data management. *ACM SIGPLAN Notices*, 45(7):63–74, July 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Ye:2010:EES

[213] Lei Ye, Gen Lu, Sushanth Kumar, Chris Gniady, and John H. Hartman. Energy-efficient storage in virtual machine environments. *ACM SIGPLAN Notices*, 45(7):75–84, July 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Kazempour:2010:AAA

[214] Vahid Kazempour, Ali Kamali, and Alexandra Fedorova. AASH: an

asymmetry-aware scheduler for hypervisors. *ACM SIGPLAN Notices*, 45 (7):85–96, July 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Lee:2010:SSR

[215] Min Lee, A. S. Krishnakumar, P. Krishnan, Navjot Singh, and Shalini Yajnik. Supporting soft real-time tasks in the Xen hypervisor. *ACM SIGPLAN Notices*, 45(7):97–108, July 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Odaira:2010:ERT

[216] Rei Odaira, Kazunori Ogata, Kiyokuni Kawachiya, Tamiya Onodera, and Toshio Nakatani. Efficient runtime tracking of allocation sites in Java. *ACM SIGPLAN Notices*, 45(7):109–120, July 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Tatsubori:2010:EJT

[217] Michiaki Tatsubori, Akihiko Tozawa, Toyotaro Suzumura, Scott Trent, and Tamiya Onodera. Evaluation of a just-in-time compiler retrofitted for PHP. *ACM SIGPLAN Notices*, 45 (7):121–132, July 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Namjoshi:2010:NOP

[218] Manjiri A. Namjoshi and Prasad A. Kulkarni. Novel online profiling for virtual machines. *ACM SIGPLAN Notices*, 45(7):133–144, July 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Guha:2010:DPS

[219] Apala Guha, Kim hazelwood, and Mary Lou Soffa. DBT path selection for holistic memory efficiency and performance. *ACM SIGPLAN Notices*, 45 (7):145–156, July 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Kondoh:2010:DBT

[220] Goh Kondoh and Hideaki Komatsu. Dynamic binary translation specialized for embedded systems. *ACM SIGPLAN Notices*, 45(7):157–166, July 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Barabash:2010:TGC

[221] Katherine Barabash and Erez Petrank. Tracing garbage collection on highly parallel platforms. *ACM SIGPLAN Notices*, 45(8):1–10, August 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Siebert:2010:CPR

[222] Fridtjof Siebert. Concurrent, parallel, real-time garbage-collection. *ACM SIGPLAN Notices*, 45(8):11–20, August 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Anderson:2010:OPN

[223] Todd A. Anderson. Optimizations in a private nursery-based garbage collector. *ACM SIGPLAN Notices*, 45(8):

21–30, August 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Nagarakatte:2010:CCE

[224] Santosh Nagarakatte, Jianzhou Zhao, Milo M. K. Martin, and Steve Zdancewic. CETS: compiler enforced temporal safety for C. *ACM SIGPLAN Notices*, 45(8):31–40, August 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Vechev:2010:PPC

[225] Martin Vechev, Eran Yahav, and Greta Yorsh. PHALANX: parallel checking of expressive heap assertions. *ACM SIGPLAN Notices*, 45(8):41–50, August 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Sewell:2010:MEA

[226] Peter Sewell. Memory, an elusive abstraction. *ACM SIGPLAN Notices*, 45 (8):51–52, August 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Petricek:2010:CHG

[227] Tomas Petricek and Don Syme. Collecting Hollywood's garbage: avoiding space-leaks in composite events. *ACM SIGPLAN Notices*, 45(8):53–62, August 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Tian:2010:SPU

[228] Chen Tian, Min Feng, and Rajiv Gupta. Speculative parallelization using state separation and multiple value prediction. *ACM SIGPLAN Notices*, 45(8):63–72, August 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Ugawa:2010:IRB

[229] Tomoharu Ugawa, Hideya Iwasaki, and Taiichi Yuasa. Improved replication-based incremental garbage collection for embedded systems. *ACM SIGPLAN Notices*, 45(8):73–82, August 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Hellyer:2010:LCW

[230] Laurence Hellyer, Richard Jones, and Antony L. Hosking. The locality of concurrent write barriers. *ACM SIGPLAN Notices*, 45(8):83–92, August 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Zhao:2010:EMS

[231] Qin Zhao, Derek Bruening, and Saman Amarasinghe. Efficient memory shadowing for 64-bit architectures. *ACM SIGPLAN Notices*, 45(8):93–102, August 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Singer:2010:EGC

[232] Jeremy Singer, Richard E. Jones, Gavin Brown, and Mikel Luján. The economics of garbage collection. *ACM SIGPLAN Notices*, 45(8):103–112, August 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Beg:2010:GTA

[233] Mirza Beg and Peter van Beek. A graph theoretic approach to cache-conscious placement of data for direct mapped caches. *ACM SIGPLAN Notices*, 45(8): 113–120, August 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Albert:2010:PIM

[234] Elvira Albert, Samir Genaim, and Miguel Gómez-Zamalloa. Parametric inference of memory requirements for garbage collected languages. *ACM SIGPLAN Notices*, 45(8):121–130, August 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Gordon:2010:MMO

[235] Michael J. C. Gordon. ML: metalanguage or object language? *ACM SIGPLAN Notices*, 45(9):1–2, September 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Chapman:2010:GAL

[236] James Chapman, Pierre-Évariste Dagand, Conor McBride, and Peter Morris. The gentle art of levitation. *ACM SIGPLAN Notices*, 45(9):3–14, September 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Vytiniotis:2010:FPE

[237] Dimitrios Vytiniotis and Andrew J. Kennedy. Functional pearl: every bit counts. *ACM SIGPLAN Notices*, 45(9):15–26, September 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Buisson:2010:RES

[238] Jérémy Buisson and Fabien Dagnat. ReCaml: execution state as the cornerstone of reconfigurations. *ACM SIGPLAN Notices*, 45(9):27–38, September 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Mazurak:2010:LCC

[239] Karl Mazurak and Steve Zdancewic. Lolliproc: to concurrency from classical linear logic via Curry–Howard and control. *ACM SIGPLAN Notices*, 45(9): 39–50, September 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

VanHorn:2010:AAM

[240] David Van Horn and Matthew Might. Abstracting abstract machines. *ACM SIGPLAN Notices*, 45(9):51–62, September 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Holdermans:2010:PFA

[241] Stefan Holdermans and Jurriaan Hage. Polyvariant flow analysis with higher-ranked polymorphic types and higher-order effect operators. *ACM SIGPLAN Notices*, 45(9):63–74, September 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Naylor:2010:RR

[242] Matthew Naylor and Colin Runciman. The Reduceron reconfigured.

ACM SIGPLAN Notices, 45(9):75–86, September 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Scott:2010:UFP

[243] David Scott, Richard Sharp, Thomas Gazagnaire, and Anil Madhavapeddy. Using functional programming within an industrial product group: perspectives and perceptions. *ACM SIGPLAN Notices*, 45(9):87–92, September 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Bergstrom:2010:LTS

[244] Lars Bergstrom, Mike Rainey, John Reppy, Adam Shaw, and Matthew Fluet. Lazy tree splitting. *ACM SIGPLAN Notices*, 45(9):93–104, September 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Bierman:2010:SSS

[245] Gavin M. Bierman, Andrew D. Gordon, Catalin Hritcu, and David Langworthy. Semantic subtyping with an SMT solver. *ACM SIGPLAN Notices*, 45(9):105–116, September 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Tobin-Hochstadt:2010:LTU

[246] Sam Tobin-Hochstadt and Matthias Felleisen. Logical types for untyped languages. *ACM SIGPLAN Notices*, 45 (9):117–128, September 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Felleisen:2010:TC

[247] Matthias Felleisen. TeachScheme!: a checkpoint. *ACM SIGPLAN Notices*, 45(9):129–130, September 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Crary:2010:HOR

[248] Karl Crary. Higher-order representation of substructural logics. *ACM SIGPLAN Notices*, 45(9):131–142, September 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Dreyer:2010:IHO

[249] Derek Dreyer, Georg Neis, and Lars Birkedal. The impact of higher-order state and control effects on local relational reasoning. *ACM SIGPLAN Notices*, 45(9):143–156, September 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Reed:2010:DMT

[250] Jason Reed and Benjamin C. Pierce. Distance makes the types grow stronger: a calculus for differential privacy. *ACM SIGPLAN Notices*, 45(9): 157–168, September 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Morgenstern:2010:STP

[251] Jamie Morgenstern and Daniel R. Licata. Security-typed programming within dependently typed programming. *ACM SIGPLAN Notices*, 45(9): 169–180, September 2010. CODEN

SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Voigtlander:2010:CSS

[252] Janis Voigtländer, Zhenjiang Hu, Kazutaka Matsuda, and Meng Wang. Combining syntactic and semantic bidirectionalization. *ACM SIGPLAN Notices*, 45(9):181–192, September 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Barbosa:2010:MLA

[253] Davi M. J. Barbosa, Julien Cretin, Nate Foster, Michael Greenberg, and Benjamin C. Pierce. Matching lenses: alignment and view update. *ACM SIGPLAN Notices*, 45(9):193–204, September 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Hidaka:2010:BGT

[254] Soichiro Hidaka, Zhenjiang Hu, Kazuhiro Inaba, Hiroyuki Kato, Kazutaka Matsuda, and Keisuke Nakano. Bidirectionalizing graph transformations. *ACM SIGPLAN Notices*, 45(9): 205–216, September 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Pouillard:2010:FLP

[255] Nicolas Pouillard and François Pottier. A fresh look at programming with names and binders. *ACM SIGPLAN Notices*, 45(9):217–228, September 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Crestani:2010:ERG

[256] Marcus Crestani and Michael Sperber. Experience report: growing programming languages for beginning students. *ACM SIGPLAN Notices*, 45(9):229–234, September 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Culpepper:2010:FM

[257] Ryan Culpepper and Matthias Felleisen. Fortifying macros. *ACM SIGPLAN Notices*, 45(9):235–246, September 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Blelloch:2010:FPA

[258] Guy E. Blelloch. Functional parallel algorithms. *ACM SIGPLAN Notices*, 45(9):247–248, September 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Arnold:2010:SVS

[259] Gilad Arnold, Johannes Hölzl, Ali Sinan Köksal, Rastislav Bodík, and Mooly Sagiv. Specifying and verifying sparse matrix codes. *ACM SIGPLAN Notices*, 45(9):249–260, September 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Keller:2010:RSP

[260] Gabriele Keller, Manuel M. T. Chakravarty, Roman Leshchinskiy, Simon Peyton Jones, and Ben Lippmeier. Regular, shape-polymorphic, parallel arrays in Haskell. *ACM SIGPLAN Notices*, 45(9):261–272, September 2010.

CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

McCreight:2010:CFC

[261] Andrew McCreight, Tim Chevalier, and Andrew Tolmach. A certified framework for compiling and executing garbage-collected languages. *ACM SIGPLAN Notices*, 45(9):273–284, September 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Danielsson:2010:TPC

[262] Nils Anders Danielsson. Total parser combinators. *ACM SIGPLAN Notices*, 45(9):285–296, September 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Brady:2010:SYI

[263] Edwin C. Brady and Kevin Hammond. Scrapping your inefficient engine: using partial evaluation to improve domain-specific language implementation. *ACM SIGPLAN Notices*, 45(9):297–308, September 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Mitchell:2010:RS

[264] Neil Mitchell. Rethinking supercompilation. *ACM SIGPLAN Notices*, 45 (9):309–320, September 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Chargueraud:2010:PVT

[265] Arthur Charguéraud. Program verification through characteristic formulae. *ACM SIGPLAN Notices*, 45(9):321–332, September 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Stampoulis:2010:VTC

[266] Antonis Stampoulis and Zhong Shao. VeriML: typed computation of logical terms inside a language with effects. *ACM SIGPLAN Notices*, 45(9):333–344, September 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Bernardy:2010:PDT

[267] Jean-Philippe Bernardy, Patrik Jansson, and Ross Paterson. Parametricity and dependent types. *ACM SIGPLAN Notices*, 45(9):345–356, September 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Fischer:2010:PRE

[268] Sebastian Fischer, Frank Huch, and Thomas Wilke. A play on regular expressions: functional pearl. *ACM SIGPLAN Notices*, 45(9):357–368, September 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Pop:2010:ERH

[269] Iustin Pop. Experience report: Haskell as a reagent: results and observations on the use of Haskell in a Python project. *ACM SIGPLAN Notices*, 45(9):369–374, September 2010. CODEN SINODQ. ISSN 0362-1340

(print), 1523-2867 (print), 1558-1160 (electronic).

Morris:2010:ICT

[270] J. Garrett Morris and Mark P. Jones. Instance chains: type class programming without overlapping instances. *ACM SIGPLAN Notices*, 45(9):375–386, September 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Forrest:2010:CES

[271] Stephanie Forrest. The case for evolvable software. *ACM SIGPLAN Notices*, 45(10):1, October 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Pierce:2010:ASF

[272] Benjamin C. Pierce. Art, science, and fear. *ACM SIGPLAN Notices*, 45 (10):2, October 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Syme:2010:FTS

[273] Don Syme. F#: Taking succinct, efficient, typed functional programming into the mainstream. *ACM SIGPLAN Notices*, 45(10):3, October 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Stanley:2010:AOH

[274] Kenneth O. Stanley. To achieve our highest goals, we must be willing to abandon them. *ACM SIGPLAN Notices*, 45(10):3, October 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Roberson:2010:EMG

[275] Michael Roberson and Chandrasekhar Boyapati. Efficient modular glass box software model checking. *ACM SIGPLAN Notices*, 45(10):4–21, October 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Hanenberg:2010:EAS

[276] Stefan Hanenberg. An experiment about static and dynamic type systems: doubts about the positive impact of static type systems on development time. *ACM SIGPLAN Notices*, 45(10): 22–35, October 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Itzhaky:2010:SIS

[277] Shachar Itzhaky, Sumit Gulwani, Neil Immerman, and Mooly Sagiv. A simple inductive synthesis methodology and its applications. *ACM SIGPLAN Notices*, 45(10):36–46, October 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Mercadal:2010:DSA

[278] Julien Mercadal, Quentin Enard, Charles Consel, and Nicolas Loriant. A domain-specific approach to architecturing error handling in pervasive computing. *ACM SIGPLAN Notices*, 45(10):47–61, October 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Li:2010:GFR

[279] Wei Li, Charles Zhang, and Songlin Hu. G-Finder: routing programming ques-

tions closer to the experts. *ACM SIGPLAN Notices*, 45(10):62–73, October 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Hoda:2010:AC

[280] Rashina Hoda, Philippe Kruchten, James Noble, and Stuart Marshall. Agility in context. *ACM SIGPLAN Notices*, 45(10):74–88, October 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Auerbach:2010:LJC

[281] Joshua Auerbach, David F. Bacon, Perry Cheng, and Rodric Rabbah. Lime: a Java-compatible and synthesizable language for heterogeneous architectures. *ACM SIGPLAN Notices*, 45(10):89–108, October 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Kou:2010:OFF

[282] Stephen Kou and Jens Palsberg. From OO to FPGA: fitting round objects into square hardware? *ACM SIGPLAN Notices*, 45(10):109–124, October 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Tian:2010:ICP

[283] Kai Tian, Yunlian Jiang, Eddy Z. Zhang, and Xipeng Shen. An input-centric paradigm for program dynamic optimizations. *ACM SIGPLAN Notices*, 45(10):125–139, October 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Wood:2010:CSS

[284] Benjamin P. Wood, Adrian Sampson, Luis Ceze, and Dan Grossman. Composable specifications for structured shared-memory communication. *ACM SIGPLAN Notices*, 45(10):140–159, October 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Shi:2010:DUW

[285] Yao Shi, Soyeon Park, Zuoning Yin, Shan Lu, Yuanyuan Zhou, Wenguang Chen, and Weimin Zheng. Do I use the wrong definition?: DeFuse: definition-use invariants for detecting concurrency and sequential bugs. *ACM SIGPLAN Notices*, 45(10):160–174, October 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Gabel:2010:SSD

[286] Mark Gabel, Junfeng Yang, Yuan Yu, Moises Goldszmidt, and Zhendong Su. Scalable and systematic detection of buggy inconsistencies in source code. *ACM SIGPLAN Notices*, 45(10):175–190, October 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Ogata:2010:SJN

[287] Kazunori Ogata, Dai Mikurube, Kiyokuni Kawachiya, Scott Trent, and Tamiya Onodera. A study of Java's non-Java memory. *ACM SIGPLAN Notices*, 45(10):191–204, October 2010. CODEN SINODQ. ISSN 0362-1340

(print), 1523-2867 (print), 1558-1160 (electronic).

McIlroy:2010:HJR

[288] Ross McIlroy and Joe Sventek. HeraJVM: a runtime system for heterogeneous multi-core architectures. *ACM SIGPLAN Notices*, 45(10):205–222, October 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Wegiel:2010:CLT

[289] Michal Wegiel and Chandra Krintz. Cross-language, type-safe, and transparent object sharing for co-located managed runtimes. *ACM SIGPLAN Notices*, 45(10):223–240, October 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Jin:2010:ISS

[290] Guoliang Jin, Aditya Thakur, Ben Liblit, and Shan Lu. Instrumentation and sampling strategies for cooperative concurrency bug isolation. *ACM SIGPLAN Notices*, 45(10):241–255, October 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Reichenbach:2010:WCG

[291] Christoph Reichenbach, Neil Immerman, Yannis Smaragdakis, Edward E. Aftandilian, and Samuel Z. Guyer. What can the GC compute efficiently?: a language for heap assertions at GC time. *ACM SIGPLAN Notices*, 45(10): 256–269, October 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Purandare:2010:MOS

[292] Rahul Purandare, Matthew B. Dwyer, and Sebastian Elbaum. Monitor optimization via stutter-equivalent loop transformation. *ACM SIGPLAN Notices*, 45(10):270–285, October 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Schaefer:2010:SIR

[293] Max Schaefer and Oege de Moor. Specifying and implementing refactorings. *ACM SIGPLAN Notices*, 45(10):286–301, October 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Nguyen:2010:GBA

[294] Hoan Anh Nguyen, Tung Thanh Nguyen, Gary Wilson, Jr., Anh Tuan Nguyen, Miryung Kim, and Tien N. Nguyen. A graph-based approach to API usage adaptation. *ACM SIGPLAN Notices*, 45(10):302–321, October 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Kell:2010:CAA

[295] Stephen Kell. Component adaptation and assembly using interface relations. *ACM SIGPLAN Notices*, 45(10):322–340, October 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Oliveira:2010:TCO

[296] Bruno C. d. S. Oliveira, Adriaan Moors, and Martin Odersky. Type classes as objects and implicits. *ACM SIGPLAN Notices*, 45(10):341–360,

October 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Lerner:2010:SDT

[297] Benjamin S. Lerner, Herman Venter, and Dan Grossman. Supporting dynamic, third-party code customizations in JavaScript using aspects. *ACM SIGPLAN Notices*, 45(10):361–376, October 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Herzeel:2010:DPR

[298] Charlotte Herzeel and Pascal Costanza. Dynamic parallelization of recursive code: part 1: managing control flow interactions with the continuator. *ACM SIGPLAN Notices*, 45(10): 377–396, October 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Dillig:2010:SHA

[299] Isil Dillig, Thomas Dillig, and Alex Aiken. Symbolic heap abstraction with demand-driven axiomatization of memory invariants. *ACM SIGPLAN Notices*, 45(10):397–410, October 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Liang:2010:DEP

[300] Percy Liang, Omer Tripp, Mayur Naik, and Mooly Sagiv. A dynamic evaluation of the precision of static heap abstractions. *ACM SIGPLAN Notices*, 45(10):411–427, October 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Mendez-Lojo:2010:PIB

[301] Mario Méndez-Lojo, Augustine Mathew, and Keshav Pingali. Parallel inclusion-based points-to analysis. *ACM SIGPLAN Notices*, 45(10):428–443, October 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Kats:2010:SLW

[302] Lennart C. L. Kats and Eelco Visser. The Spoofax language workbench: rules for declarative specification of languages and IDEs. *ACM SIGPLAN Notices*, 45(10):444–463, October 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Servetto:2010:MMC

[303] Marco Servetto and Elena Zucca. MetaFJig: a meta-circular composition language for Java-like classes. *ACM SIGPLAN Notices*, 45(10):464–483, October 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Klose:2010:MLM

[304] Karl Klose and Klaus Ostermann. Modular logic metaprogramming. *ACM SIGPLAN Notices*, 45(10):484–503, October 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

vanStaden:2010:RAM

[305] Stephan van Staden and Cristiano Calcagno. Reasoning about multiple related abstractions with MultiStar. *ACM SIGPLAN Notices*, 45(10):

504–519, October 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Qi:2010:HFS

[306] Xin Qi and Andrew C. Myers. Homogeneous family sharing. *ACM SIGPLAN Notices*, 45(10):520–538, October 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Chiba:2010:MMC

[307] Shigeru Chiba, Atsushi Igarashi, and Salikh Zakirov. Mostly modular compilation of crosscutting concerns by contextual predicate dispatch. *ACM SIGPLAN Notices*, 45(10):539–554, October 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Klein:2010:RTH

[308] Casey Klein, Matthew Flatt, and Robert Bruce Findler. Random testing for higher-order, stateful programs. *ACM SIGPLAN Notices*, 45(10):555–566, October 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

McCarthy:2010:TSS

[309] Jay A. McCarthy. The two-state solution: native and serializable continuations accord. *ACM SIGPLAN Notices*, 45(10):567–582, October 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Swaine:2010:BFI

[310] James Swaine, Kevin Tew, Peter Dinda, Robert Bruce Findler, and Matthew Flatt. Back to the futures: incremental parallelization of existing sequential runtime systems. *ACM SIGPLAN Notices*, 45(10):583–597, October 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Zibin:2010:OIG

[311] Yoav Zibin, Alex Potanin, Paley Li, Mahmood Ali, and Michael D. Ernst. Ownership and immutability in generic Java. *ACM SIGPLAN Notices*, 45(10): 598–617, October 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Cameron:2010:TO

[312] Nicholas Cameron, James Noble, and Tobias Wrigstad. Tribal ownership. *ACM SIGPLAN Notices*, 45(10):618–633, October 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Matsakis:2010:TAT

[313] Nicholas D. Matsakis and Thomas R. Gross. A time-aware type system for data-race protection and guaranteed initialization. *ACM SIGPLAN Notices*, 45(10):634–651, October 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Upadhyaya:2010:AAR

[314] Gautam Upadhyaya, Samuel P. Midkiff, and Vijay S. Pai. Automatic atomic region identification in shared memory SPMD programs. *ACM SIGPLAN Notices*, 45(10):652–670, October 2010. CODEN SINODQ. ISSN

0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Kulkarni:2010:TTP

[315] Aditya Kulkarni, Yu David Liu, and Scott F. Smith. Task types for pervasive atomicity. *ACM SIGPLAN Notices*, 45(10):671–690, October 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Burckhardt:2010:CPR

[316] Sebastian Burckhardt, Alexandro Baldassin, and Daan Leijen. Concurrent programming with revisions and isolation types. *ACM SIGPLAN Notices*, 45(10):691–707, October 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Bebenita:2010:STB

[317] Michael Bebenita, Florian Brandner, Manuel Fahndrich, Francesco Logozzo, Wolfram Schulte, Nikolai Tillmann, and Herman Venter. SPUR: a trace-based JIT compiler for CIL. *ACM SIGPLAN Notices*, 45(10):708–725, October 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Kapur:2010:RRL

[318] Puneet Kapur, Brad Cossette, and Robert J. Walker. Refactoring references for library migration. *ACM SIGPLAN Notices*, 45(10):726–738, October 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Altman:2010:PAI

[319] Erik Altman, Matthew Arnold, Stephen Fink, and Nick Mitchell. Performance analysis of idle programs. *ACM SIGPLAN Notices*, 45(10):739–753, October 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Davis:2010:RBL

[320] Samuel Davis and Gregor Kiczales. Registration-based language abstractions. *ACM SIGPLAN Notices*, 45(10): 754–773, October 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Verwaest:2010:PBR

[321] Toon Verwaest, Camillo Bruni, David Gurtner, Adrian Lienhard, and Oscar Niestrasz. Pinocchio: bringing reflection to life with first-class interpreters. *ACM SIGPLAN Notices*, 45(10):774–789, October 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Rajan:2010:CMD

[322] Hridesh Rajan, Steven M. Kautz, and Wayne Rowcliffe. Concurrency by modularity: design patterns, a case in point. *ACM SIGPLAN Notices*, 45(10): 790–805, October 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Rinard:2010:PSA

[323] Martin Rinard, Henry Hoffmann, Sasa Misailovic, and Stelios Sidiroglou. Patterns and statistical analysis for understanding reduced resource computing. *ACM SIGPLAN Notices*, 45(10):

806–821, October 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Sorensen:2010:PTC

[324] Andrew Sorensen and Henry Gardner. Programming with time: cyber-physical programming with impromptu. *ACM SIGPLAN Notices*, 45 (10):822–834, October 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Chafi:2010:LVH

[325] Hassan Chafi, Zach DeVito, Adriaan Moors, Tiark Rompf, Arvind K. Sujeeth, Pat Hanrahan, Martin Odersky, and Kunle Olukotun. Language virtualization for heterogeneous parallel computing. *ACM SIGPLAN Notices*, 45(10):835–847, October 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Ossher:2010:FMT

[326] Harold Ossher, Rachel Bellamy, Ian Simmonds, David Amid, Ateret Anaby-Tavor, Matthew Callery, Michael Desmond, Jacqueline de Vries, Amit Fisher, and Sophia Krasikov. Flexible modeling tools for pre-requirements analysis: conceptual architecture and research challenges. *ACM SIGPLAN Notices*, 45(10):848–864, October 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Dumitras:2010:UUI

[327] Tudor Dumitras, Priya Narasimhan, and Eli Tilevich. To upgrade or not to upgrade: impact of online upgrades across multiple administrative domains. *ACM SIGPLAN Notices*, 45(10):865–876, October 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Arnold:2010:MAP

[328] Kenneth C. Arnold and Henry Lieberman. Managing ambiguity in programming by finding unambiguous examples. *ACM SIGPLAN Notices*, 45(10): 877–884, October 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Gabriel:2010:BST

[329] Richard P. Gabriel and Kevin J. Sullivan. Better science through art. *ACM SIGPLAN Notices*, 45(10):885–900, October 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Quillien:2010:RDN

[330] Jenny Quillien and Dave West. Rubber ducks, nightmares, and unsaturated predicates: proto-scientific schemata are good for agile. *ACM SIGPLAN Notices*, 45(10):901–917, October 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Kats:2010:PDS

[331] Lennart C. L. Kats, Eelco Visser, and Guido Wachsmuth. Pure and declarative syntax definition: paradise lost and regained. *ACM SIGPLAN Notices*, 45(10):918–932, October 2010. CODEN SINODQ. ISSN 0362-1340

(print), 1523-2867 (print), 1558-1160 (electronic).

Hanenberg:2010:FHL

[332] Stefan Hanenberg. Faith, hope, and love: an essay on software science's neglect of human factors. *ACM SIGPLAN Notices*, 45(10):933–946, October 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Adamczyk:2010:TBD

[333] Paul Adamczyk and Munawar Hafiz. The Tower of Babel did not fail. *ACM SIGPLAN Notices*, 45(10):947–957, October 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Rendel:2010:ISD

[334] Tillmann Rendel and Klaus Ostermann. Invertible syntax descriptions: unifying parsing and pretty printing. *ACM SIGPLAN Notices*, 45(11):1–12, November 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Straka:2010:PHC

[335] Milan Straka. The performance of the Haskell containers package. *ACM SIGPLAN Notices*, 45(11):13–24, November 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Pirog:2010:SDS

[336] Maciej Pirog and Dariusz Biernacki. A systematic derivation of the STG machine verified in Coq. *ACM SIGPLAN Notices*, 45(11):25–36, November 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Magalhaes:2010:GDM

[337] José Pedro Magalhães, Atze Dijkstra, Johan Jeuring, and Andres Löh. A generic deriving mechanism for Haskell. *ACM SIGPLAN Notices*, 45(11):37–48, November 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

vanGroningen:2010:ESB

[338] John van Groningen, Thomas van Noort, Peter Achten, Pieter Koopman, and Rinus Plasmeijer. Exchanging sources between Clean and Haskell: a double-edged front end for the Clean compiler. *ACM SIGPLAN Notices*, 45(11):49–60, November 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Morris:2010:ERU

[339] J. Garrett Morris. Experience report: using hackage to inform language design. *ACM SIGPLAN Notices*, 45(11):61–66, November 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Mainland:2010:NEC

[340] Geoffrey Mainland and Greg Morrisett. Nikola: embedding compiled GPU functions in Haskell. *ACM SIGPLAN Notices*, 45(11):67–78, November 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Launchbury:2010:COH

[341] John Launchbury and Trevor Elliott. Concurrent orchestration in Haskell. *ACM SIGPLAN Notices*, 45(11):79–90, November 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Marlow:2010:SNM

[342] Simon Marlow, Patrick Maier, Hans-Wolfgang Loidl, Mustafa K. Aswad, and Phil Trinder. Seq no more: better strategies for parallel Haskell. *ACM SIGPLAN Notices*, 45(11):91–102, November 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

OSullivan:2010:SEH

[343] Bryan O'Sullivan and Johan Tibell. Scalable I/O event handling for GHC. *ACM SIGPLAN Notices*, 45(11):103–108, November 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Terei:2010:LBG

[344] David A. Terei and Manuel M. T. Chakravarty. An `llvm` backend for GHC. *ACM SIGPLAN Notices*, 45 (11):109–120, November 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Ramsey:2010:HMR

[345] Norman Ramsey, João Dias, and Simon Peyton Jones. Hoopl: a modular, reusable library for dataflow analysis and transformation. *ACM SIGPLAN Notices*, 45(11):121–134, November 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Bolingbroke:2010:SE

[346] Maximilian Bolingbroke and Simon Peyton Jones. Supercompilation by evaluation. *ACM SIGPLAN Notices*, 45(11):135–146, November 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Yorgey:2010:SFT

[347] Brent A. Yorgey. Species and functors and types, oh my! *ACM SIGPLAN Notices*, 45(11):147–158, November 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Brunthaler:2010:EIU

[348] Stefan Brunthaler. Efficient interpretation using quickening. *ACM SIGPLAN Notices*, 45(12):1–14, December 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Zakirov:2010:ODD

[349] Salikh S. Zakirov, Shigeru Chiba, and Etsuya Shibayama. Optimizing dynamic dispatch with fine-grained state tracking. *ACM SIGPLAN Notices*, 45 (12):15–26, December 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Gorbovitski:2010:AAO

[350] Michael Gorbovitski, Yanhong A. Liu, Scott D. Stoller, Tom Rothamel, and

Tuncay K. Tekle. Alias analysis for optimization of dynamic languages. *ACM SIGPLAN Notices*, 45(12):27–42, December 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Pestov:2010:FDS

[351] Sviatoslav Pestov, Daniel Ehrenberg, and Joe Groff. Factor: a dynamic stack-based programming language. *ACM SIGPLAN Notices*, 45 (12):43–58, December 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

VanCutsem:2010:PDP

[352] Tom Van Cutsem and Mark S. Miller. Proxies: design principles for robust object-oriented intercession APIs. *ACM SIGPLAN Notices*, 45(12):59–72, December 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Tratt:2010:EIL

[353] Laurence Tratt. Experiences with an Icon3-like expression evaluation system. *ACM SIGPLAN Notices*, 45(12): 73–80, December 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Axelsen:2010:CDM

[354] Eyvind W. Axelsen, Stein Krogdahl, and Birger Møller-Pedersen. Controlling dynamic module composition through an extensible meta-level API. *ACM SIGPLAN Notices*, 45(12):81–96, December 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Strickland:2010:CFC

[355] T. Stephen Strickland and Matthias Felleisen. Contracts for first-class classes. *ACM SIGPLAN Notices*, 45 (12):97–112, December 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Leroy:2011:VSD

[356] Xavier Leroy. Verified squared: does critical software deserve verified tools? *ACM SIGPLAN Notices*, 46(1):1–2, January 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Lhotak:2011:PAE

[357] Ondrej Lhoták and Kwok-Chiang Andrew Chung. Points-to analysis with efficient strong updates. *ACM SIGPLAN Notices*, 46(1):3–16, January 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Smaragdakis:2011:PYC

[358] Yannis Smaragdakis, Martin Bravenboer, and Ondrej Lhoták. Pick your contexts well: understanding object-sensitivity. *ACM SIGPLAN Notices*, 46 (1):17–30, January 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Liang:2011:LMA

[359] Percy Liang, Omer Tripp, and Mayur Naik. Learning minimal abstractions. *ACM SIGPLAN Notices*, 46(1):31–42, January 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Sevcik:2011:RMC

[360] Jaroslav Ševçik, Viktor Vafeiadis, Francesco Zappa Nardelli, Suresh Jagannathan, and Peter Sewell. Relaxed-memory concurrency and verified compilation. *ACM SIGPLAN Notices*, 46 (1):43–54, January 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Batty:2011:MCC

[361] Mark Batty, Scott Owens, Susmit Sarkar, Peter Sewell, and Tjark Weber. Mathematizing C++ concurrency. *ACM SIGPLAN Notices*, 46(1):55–66, January 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Ramananandro:2011:FVO

[362] Tahina Ramananandro, Gabriel Dos Reis, and Xavier Leroy. Formal verification of object layout for C++ multiple inheritance. *ACM SIGPLAN Notices*, 46(1):67–80, January 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Choi:2011:SAM

[363] Wontae Choi, Baris Aktemur, Kwangkeun Yi, and Makoto Tatsuta. Static analysis of multi-staged programs via unstaging translation. *ACM SIGPLAN Notices*, 46(1):81–92, January 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Schwarz:2011:SAI

[364] Martin D. Schwarz, Helmut Seidl, Vesal Vojdani, Peter Lammich, and Markus Müller-Olm. Static analysis of interrupt-driven programs synchronized via the priority ceiling protocol. *ACM SIGPLAN Notices*, 46(1):93–104, January 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Cousot:2011:PSF

[365] Patrick Cousot, Radhia Cousot, and Francesco Logozzo. A parametric segmentation functor for fully automatic and scalable array content analysis. *ACM SIGPLAN Notices*, 46(1):105–118, January 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Birkedal:2011:SIK

[366] Lars Birkedal, Bernhard Reus, Jan Schwinghammer, Kristian Støvring, Jacob Thamsborg, and Hongseok Yang. Step-indexed Kripke models over recursive worlds. *ACM SIGPLAN Notices*, 46(1):119–132, January 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Hur:2011:KLR

[367] Chung-Kil Hur and Derek Dreyer. A Kripke logical relation between ML and assembly. *ACM SIGPLAN Notices*, 46(1):133–146, January 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Pottier:2011:TSP

[368] François Pottier. A typed store-passing translation for general references. *ACM SIGPLAN Notices*, 46(1):147–158, January 2011. CODEN SINODQ. ISSN

0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Prountzos:2011:SAO

[369] Dimitrios Prountzos, Roman Manevich, Keshav Pingali, and Kathryn S. McKinley. A shape analysis for optimizing parallel graph programs. *ACM SIGPLAN Notices*, 46(1):159–172, January 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Rival:2011:CCA

[370] Xavier Rival and Bor-Yuh Evan Chang. Calling context abstraction with shapes. *ACM SIGPLAN Notices*, 46(1):173–186, January 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Dillig:2011:PRP

[371] Isil Dillig, Thomas Dillig, and Alex Aiken. Precise reasoning for programs using containers. *ACM SIGPLAN Notices*, 46(1):187–200, January 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Ahmed:2011:BA

[372] Amal Ahmed, Robert Bruce Findler, Jeremy G. Siek, and Philip Wadler. Blame for all. *ACM SIGPLAN Notices*, 46(1):201–214, January 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Dimoulas:2011:CBC

[373] Christos Dimoulas, Robert Bruce Findler, Cormac Flanagan, and Matthias Felleisen. Correct blame for contracts: no more scapegoating. *ACM SIGPLAN Notices*, 46(1):215–226, January 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Weirich:2011:GTA

[374] Stephanie Weirich, Dimitrios Vytiniotis, Simon Peyton Jones, and Steve Zdancewic. Generative type abstraction and type-level computation. *ACM SIGPLAN Notices*, 46(1):227–240, January 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

MacLaurin:2011:DKT

[375] Matthew B. MacLaurin. The design of Kodu: a tiny visual programming language for children on the Xbox 360. *ACM SIGPLAN Notices*, 46(1):241–246, January 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Turon:2011:SLR

[376] Aaron Joseph Turon and Mitchell Wand. A separation logic for refining concurrent objects. *ACM SIGPLAN Notices*, 46(1):247–258, January 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Dodds:2011:MRD

[377] Mike Dodds, Suresh Jagannathan, and Matthew J. Parkinson. Modular reasoning for deterministic parallelism. *ACM SIGPLAN Notices*, 46(1):259–270, January 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Jacobs:2011:EMF

[378] Bart Jacobs and Frank Piessens. Expressive modular fine-grained concurrency specification. *ACM SIGPLAN Notices*, 46(1):271–282, January 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Madhusudan:2011:TWA

[379] P. Madhusudan and Gennaro Parlato. The tree width of auxiliary storage. *ACM SIGPLAN Notices*, 46(1):283–294, January 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Tzevelekos:2011:FRA

[380] Nikos Tzevelekos. Fresh-register automata. *ACM SIGPLAN Notices*, 46 (1):295–306, January 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Leroux:2011:VAS

[381] Jérôme Leroux. Vector addition system reachability problem: a short self-contained proof. *ACM SIGPLAN Notices*, 46(1):307–316, January 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Gulwani:2011:ASP

[382] Sumit Gulwani. Automating string processing in spreadsheets using input-output examples. *ACM SIGPLAN Notices*, 46(1):317–330, January 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Gupta:2011:PAR

[383] Ashutosh Gupta, Corneliu Popeea, and Andrey Rybalchenko. Predicate abstraction and refinement for verifying multi-threaded programs. *ACM SIGPLAN Notices*, 46(1):331–344, January 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Ghica:2011:GSIa

[384] Dan R. Ghica and Alex Smith. Geometry of synthesis III: resource management through type inference. *ACM SIGPLAN Notices*, 46(1):345–356, January 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Hoffmann:2011:MAR

[385] Jan Hoffmann, Klaus Aehlig, and Martin Hofmann. Multivariate amortized resource analysis. *ACM SIGPLAN Notices*, 46(1):357–370, January 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Hofmann:2011:SL

[386] Martin Hofmann, Benjamin Pierce, and Daniel Wagner. Symmetric lenses. *ACM SIGPLAN Notices*, 46(1):371–384, January 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Henglein:2011:REC

[387] Fritz Henglein and Lasse Nielsen. Regular expression containment: coinductive axiomatization and computational interpretation. *ACM SIGPLAN Notices*, 46(1):385–398, January 2011.

CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Cook:2011:MPD

[388] Byron Cook and Eric Koskinen. Making prophecies with decision predicates. *ACM SIGPLAN Notices*, 46(1):399–410, January 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Emmi:2011:DBS

[389] Michael Emmi, Shaz Qadeer, and Zvonimir Rakamarić. Delay-bounded scheduling. *ACM SIGPLAN Notices*, 46(1):411–422, January 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Sinha:2011:IA

[390] Nishant Sinha and Chao Wang. On interference abstractions. *ACM SIGPLAN Notices*, 46(1):423–434, January 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Denielou:2011:DMS

[391] Pierre-Malo Deniélou and Nobuko Yoshida. Dynamic multirole session types. *ACM SIGPLAN Notices*, 46(1): 435–446, January 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Tov:2011:PAT

[392] Jesse A. Tov and Riccardo Pucella. Practical affine types. *ACM SIGPLAN Notices*, 46(1):447–458, January 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

An:2011:DIS

[393] Jong hoon (David) An, Avik Chaudhuri, Jeffrey S. Foster, and Michael Hicks. Dynamic inference of static types for `ruby`. *ACM SIGPLAN Notices*, 46(1):459–472, January 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Gordon:2011:RMV

[394] Andrew D. Gordon, Robert Harper, John Harrison, Alan Jeffrey, and Peter Sewell. Robin Milner 1934–2010: verification, languages, and concurrency. *ACM SIGPLAN Notices*, 46(1):473–474, January 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Bendersky:2011:SOB

[395] Anna Bendersky and Erez Petrank. Space overhead bounds for dynamic memory management with partial compaction. *ACM SIGPLAN Notices*, 46 (1):475–486, January 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Attiya:2011:LOE

[396] Hagit Attiya, Rachid Guerraoui, Danny Hendler, Petr Kuznetsov, Maged M. Michael, and Martin Vechev. Laws of order: expensive synchronization in concurrent algorithms cannot be eliminated. *ACM SIGPLAN Notices*, 46(1):487–498, January 2011. CODEN SINODQ. ISSN 0362-1340

(print), 1523-2867 (print), 1558-1160 (electronic).

Esparza:2011:CPB

[397] Javier Esparza and Pierre Ganty. Complexity of pattern-based verification for multithreaded programs. *ACM SIGPLAN Notices*, 46(1):499–510, January 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Prabhu:2011:EAF

[398] Tarun Prabhu, Shreyas Ramalingam, Matthew Might, and Mary Hall. EigenCFA: accelerating flow analysis with GPUs. *ACM SIGPLAN Notices*, 46(1):511–522, January 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Feng:2011:BQP

[399] Yuan Feng, Runyao Duan, and Mingsheng Ying. Bisimulation for quantum processes. *ACM SIGPLAN Notices*, 46(1):523–534, January 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Bocchino:2011:SND

[400] Robert L. Bocchino, Jr., Stephen Heumann, Nima Honarmand, Sarita V. Adve, Vikram S. Adve, Adam Welc, and Tatiana Shpeisman. Safe nondeterminism in a deterministic-by-default parallel language. *ACM SIGPLAN Notices*, 46(1):535–548, January 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Pouchet:2011:LTC

[401] Louis-Noël Pouchet, Uday Bondhugula, Cédric Bastoul, Albert Cohen, J. Ramanujam, P. Sadayappan, and Nicolas Vasilache. Loop transformations: convexity, pruning and optimization. *ACM SIGPLAN Notices*, 46(1): 549–562, January 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Guo:2011:ECT

[402] Shu yu Guo and Jens Palsberg. The essence of compiling with traces. *ACM SIGPLAN Notices*, 46(1):563–574, January 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Ramsey:2011:RRM

[403] Norman Ramsey and João Dias. Resourceable, retargetable, modular instruction selection using a machine-independent, type-based tiling of low-level intermediate code. *ACM SIGPLAN Notices*, 46(1):575–586, January 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Ong:2011:VHO

[404] C.-H. Luke Ong and Steven James Ramsay. Verifying higher-order functional programs with pattern-matching algebraic data types. *ACM SIGPLAN Notices*, 46(1):587–598, January 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Alur:2011:STA

[405] Rajeev Alur and Pavol Cerný. Streaming transducers for algorithmic verifica-

tion of single-pass list-processing programs. *ACM SIGPLAN Notices*, 46(1): 599–610, January 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Madhusudan:2011:DLC

[406] P. Madhusudan, Gennaro Parlato, and Xiaokang Qiu. Decidable logics combining heap structures and data. *ACM SIGPLAN Notices*, 46(1):611–622, January 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Joisha:2011:TEA

[407] Pramod G. Joisha, Robert S. Schreiber, Prithviraj Banerjee, Hans J. Boehm, and Dhruva R. Chakrabarti. A technique for the effective and automatic reuse of classical compiler optimizations on multithreaded code. *ACM SIGPLAN Notices*, 46(1):623–636, January 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Lammel:2011:HGS

[408] Ralf Lämmel. The hitchhiker's guide to software languages. *ACM SIGPLAN Notices*, 46(2):1–2, February 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Erwig:2011:LSV

[409] Martin Erwig. A language for software variation research. *ACM SIGPLAN Notices*, 46(2):3–12, February 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Clarke:2011:ADM

[410] Dave Clarke, Michiel Helvensteijn, and Ina Schaefer. Abstract delta modeling. *ACM SIGPLAN Notices*, 46(2): 13–22, February 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Ryssel:2011:AVP

[411] Uwe Ryssel, Joern Ploennigs, and Klaus Kabitzsch. Automatic variation-point identification in function-block-based models. *ACM SIGPLAN Notices*, 46(2):23–32, February 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Sincero:2011:EEA

[412] Julio Sincero, Reinhard Tartler, Daniel Lohmann, and Wolfgang Schröder-Preikschat. Efficient extraction and analysis of preprocessor-based variability. *ACM SIGPLAN Notices*, 46(2): 33–42, February 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Middelkoop:2011:ITI

[413] Arie Middelkoop, Atze Dijkstra, and S. Doaitse Swierstra. Iterative type inference with attribute grammars. *ACM SIGPLAN Notices*, 46(2):43–52, February 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Krieger:2011:AES

[414] Matthias P. Krieger, Alexander Knapp, and Burkhart Wolff. Automatic and efficient simulation of operation contracts. *ACM SIGPLAN Notices*, 46(2):

53–62, February 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Long:2011:IIM

[415] Yuheng Long, Sean L. Mooney, Tyler Sondag, and Hridesh Rajan. Implicit invocation meets safe, implicit concurrency. *ACM SIGPLAN Notices*, 46(2): 63–72, February 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Navas:2011:CBR

[416] Juan F. Navas, Jean-Philippe Babau, and Jacques Pulou. A component-based run-time evolution infrastructure for resource-constrained embedded systems. *ACM SIGPLAN Notices*, 46(2): 73–82, February 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Hofer:2011:MDS

[417] Christian Hofer and Klaus Ostermann. Modular domain-specific language components in Scala. *ACM SIGPLAN Notices*, 46(2):83–92, February 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Wolfinger:2011:AGP

[418] Reinhard Wolfinger, Markus Löberbauer, Markus Jahn, and Hanspeter Mössenböck. Adding genericity to a plug-in framework. *ACM SIGPLAN Notices*, 46(2): 93–102, February 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Schulze:2011:CCF

[419] Sandro Schulze, Sven Apel, and Christian Kästner. Code clones in feature-oriented software product lines. *ACM SIGPLAN Notices*, 46(2):103–112, February 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Tanter:2011:CDA

[420] Éric Tanter, Philippe Moret, Walter Binder, and Danilo Ansaloni. Composition of dynamic analysis aspects. *ACM SIGPLAN Notices*, 46(2):113–122, February 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Wurthinger:2011:AED

[421] Thomas Würthinger, Walter Binder, Danilo Ansaloni, Philippe Moret, and Hanspeter Mössenböck. Applications of enhanced dynamic code evolution for Java in GUI development and dynamic aspect-oriented programming. *ACM SIGPLAN Notices*, 46(2):123–126, February 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Rompf:2011:LMS

[422] Tiark Rompf and Martin Odersky. Lightweight modular staging: a pragmatic approach to runtime code generation and compiled DSLs. *ACM SIGPLAN Notices*, 46(2):127–136, February 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Porkolab:2011:DSL

[423] Zoltán Porkolab and Ábel Sinkovics. Domain-specific language integration with compile-time parser generator library. *ACM SIGPLAN Notices*, 46(2): 137–146, February 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Atkinson:2011:ACT

[424] Kevin Atkinson, Matthew Flatt, and Gary Lindstrom. ABI compatibility through a customizable language. *ACM SIGPLAN Notices*, 46(2):147–156, February 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Bordignon:2011:MBK

[425] Mirko Bordignon, Ulrik Pagh Schultz, and Kasper Stoy. Model-based kinematics generation for modular mechatronic toolkits. *ACM SIGPLAN Notices*, 46(2):157–166, February 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Miao:2011:ITC

[426] Weiyu Miao and Jeremy G. Siek. Incremental type-checking for type-reflective metaprograms. *ACM SIGPLAN Notices*, 46(2):167–176, February 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Grech:2011:JGE

[427] Neville Grech, Julian Rathke, and Bernd Fischer. JEqualityGen: generating equality and hashing methods. *ACM SIGPLAN Notices*, 46(2):177–186, February 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Larus:2011:CWC

[428] James R. Larus. The cloud will change everything. *ACM SIGPLAN Notices*, 46(3):1–2, March 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Yuan:2011:ISD

[429] Ding Yuan, Jing Zheng, Soyeon Park, Yuanyuan Zhou, and Stefan Savage. Improving software diagnosability via log enhancement. *ACM SIGPLAN Notices*, 46(3):3–14, March 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Veeraraghavan:2011:DPS

[430] Kaushik Veeraraghavan, Dongyoon Lee, Benjamin Wester, Jessica Ouyang, Peter M. Chen, Jason Flinn, and Satish Narayanasamy. DoublePlay: parallelizing sequential logging and replay. *ACM SIGPLAN Notices*, 46(3):15–26, March 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Casper:2011:HAT

[431] Jared Casper, Tayo Oguntebi, Sungpack Hong, Nathan G. Bronson, Christos Kozyrakis, and Kunle Olukotun. Hardware acceleration of transactional memory on commodity systems. *ACM SIGPLAN Notices*, 46(3):27–38, March 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Dalessandro:2011:HNC

[432] Luke Dalessandro, François Carouge, Sean White, Yossi Lev, Mark Moir, Michael L. Scott, and Michael F. Spear. Hybrid NOrec: a case study in the effectiveness of best effort hardware transactional memory. *ACM SIGPLAN Notices*, 46(3):39–52, March 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Singh:2011:EPS

[433] Abhayendra Singh, Daniel Marino, Satish Narayanasamy, Todd Millstein, and Madan Musuvathi. Efficient processor support for DRFx, a memory model with exceptions. *ACM SIGPLAN Notices*, 46(3):53–66, March 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Devietti:2011:RRC

[434] Joseph Devietti, Jacob Nelson, Tom Bergan, Luis Ceze, and Dan Grossman. RCDC: a relaxed consistency deterministic computer. *ACM SIGPLAN Notices*, 46(3):67–78, March 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Burnim:2011:SCS

[435] Jacob Burnim, George Necula, and Koushik Sen. Specifying and checking semantic atomicity for multithreaded programs. *ACM SIGPLAN Notices*, 46 (3):79–90, March 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Volos:2011:MLP

[436] Haris Volos, Andres Jaan Tack, and Michael M. Swift. Mnemosyne: lightweight persistent memory. *ACM SIGPLAN Notices*, 46(3):91–104, March 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Coburn:2011:NHM

[437] Joel Coburn, Adrian M. Caulfield, Ameen Akel, Laura M. Grupp, Rajesh K. Gupta, Ranjit Jhala, and Steven Swanson. NV-Heaps: making persistent objects fast and safe with next-generation, non-volatile memories. *ACM SIGPLAN Notices*, 46(3): 105–118, March 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Schupbach:2011:DLA

[438] Adrian Schüpbach, Andrew Baumann, Timothy Roscoe, and Simon Peter. A declarative language approach to device configuration. *ACM SIGPLAN Notices*, 46(3):119–132, March 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Ryzhyk:2011:IDD

[439] Leonid Ryzhyk, John Keys, Balachandra Mirla, Arun Raghunath, Mona Vij, and Gernot Heiser. Improved device driver reliability through hardware verification reuse. *ACM SIGPLAN Notices*, 46(3):133–144, March 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Hashmi:2011:CNI

[440] Atif Hashmi, Andrew Nere, James Jamal Thomas, and Mikko Lipasti. A case for neuromorphic ISAs. *ACM SIGPLAN Notices*, 46(3):145–158, March 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Ransford:2011:MSS

[441] Benjamin Ransford, Jacob Sorber, and Kevin Fu. Mementos: system support for long-running computation on RFID-scale devices. *ACM SIGPLAN Notices*, 46(3):159–170, March 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Koukoumidis:2011:PC

[442] Emmanouil Koukoumidis, Dimitrios Lymberopoulos, Karin Strauss, Jie Liu, and Doug Burger. Pocket cloudlets. *ACM SIGPLAN Notices*, 46(3):171–184, March 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Sharma:2011:BMS

[443] Navin Sharma, Sean Barker, David Irwin, and Prashant Shenoy. Blink: managing server clusters on intermittent power. *ACM SIGPLAN Notices*, 46(3): 185–198, March 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Hoffmann:2011:DKR

[444] Henry Hoffmann, Stelios Sidiroglou, Michael Carbin, Sasa Misailovic, Anant Agarwal, and Martin Rinard. Dynamic knobs for responsive power-aware computing. *ACM SIGPLAN Notices*, 46(3):199–212, March 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Liu:2011:FSD

[445] Song Liu, Karthik Pattabiraman, Thomas Moscibroda, and Benjamin G. Zorn. Flikker: saving DRAM refresh-power through critical data partitioning. *ACM SIGPLAN Notices*, 46(3): 213–224, March 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Deng:2011:MAL

[446] Qingyuan Deng, David Meisner, Luiz Ramos, Thomas F. Wenisch, and Ricardo Bianchini. MemScale: active low-power modes for main memory. *ACM SIGPLAN Notices*, 46(3): 225–238, March 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Gao:2011:TMH

[447] Qi Gao, Wenbin Zhang, Zhezhe Chen, Mai Zheng, and Feng Qin. 2ndStrike: toward manifesting hidden concurrency typestate bugs. *ACM SIGPLAN Notices*, 46(3):239–250, March 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Zhang:2011:CDC

[448] Wei Zhang, Junghee Lim, Ramya Olichandran, Joel Scherpelz, Guoliang Jin, Shan Lu, and Thomas Reps. ConSeq: detecting concurrency bugs through sequential errors. *ACM SIGPLAN Notices*, 46(3):251–264, March

2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Chipounov:2011:SPV

[449] Vitaly Chipounov, Volodymyr Kuznetsov, and George Candea. S2E: a platform for in-vivo multi-path analysis of software systems. *ACM SIGPLAN Notices*, 46(3):265–278, March 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Hofmann:2011:EOS

[450] Owen S. Hofmann, Alan M. Dunn, Sangman Kim, Indrajit Roy, and Emmett Witchel. Ensuring operating system kernel integrity with OSck. *ACM SIGPLAN Notices*, 46(3):279–290, March 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Porter:2011:RLT

[451] Donald E. Porter, Silas Boyd-Wickizer, Jon Howell, Reuben Olinsky, and Galen C. Hunt. Rethinking the library OS from the top down. *ACM SIGPLAN Notices*, 46(3):291–304, March 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Palix:2011:FLT

[452] Nicolas Palix, Gaël Thomas, Suman Saha, Christophe Calvès, Julia Lawall, and Gilles Muller. Faults in Linux: ten years later. *ACM SIGPLAN Notices*, 46(3):305–318, March 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Esmaeilzadeh:2011:LBL

[453] Hadi Esmaeilzadeh, Ting Cao, Yang Xi, Stephen M. Blackburn, and Kathryn S. McKinley. Looking back on the language and hardware revolutions: measured power, performance, and scaling. *ACM SIGPLAN Notices*, 46(3):319–332, March 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Nguyen:2011:SCS

[454] Donald Nguyen and Keshav Pingali. Synthesizing concurrent schedulers for irregular algorithms. *ACM SIGPLAN Notices*, 46(3):333–344, March 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Hoang:2011:ECT

[455] Giang Hoang, Robby Bruce Findler, and Russ Joseph. Exploring circuit timing-aware language and compilation. *ACM SIGPLAN Notices*, 46(3): 345–356, March 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Farhad:2011:OAM

[456] Sardar M. Farhad, Yousun Ko, Bernd Burgstaller, and Bernhard Scholz. Orchestration by approximation: mapping stream programs onto multicore architectures. *ACM SIGPLAN Notices*, 46(3):357–368, March 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Zhang:2011:FED

[457] Eddy Z. Zhang, Yunlian Jiang, Ziyu Guo, Kai Tian, and Xipeng Shen. On-the-fly elimination of dynamic irregularities for GPU computing. *ACM SIGPLAN Notices*, 46(3):369–380, March 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Hormati:2011:SPS

[458] Amir H. Hormati, Mehrzad Samadi, Mark Woh, Trevor Mudge, and Scott Mahlke. Sponge: portable stream programming on graphics engines. *ACM SIGPLAN Notices*, 46(3):381–392, March 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Kamruzzaman:2011:ICP

[459] Md Kamruzzaman, Steven Swanson, and Dean M. Tullsen. Inter-core prefetching for multicore processors using migrating helper threads. *ACM SIGPLAN Notices*, 46(3):393–404, March 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Hayashizaki:2011:IPT

[460] Hiroshige Hayashizaki, Peng Wu, Hiroshi Inoue, Mauricio J. Serrano, and Toshio Nakatani. Improving the performance of trace-based systems by false loop filtering. *ACM SIGPLAN Notices*, 46(3):405–418, March 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Bala:2011:DTD

[461] Vasanth Bala, Evelyn Duesterwald, and Sanjeev Banerjia. Dynamo: a transparent dynamic optimization system. *ACM SIGPLAN Notices*, 46 (4):41–52, April 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Claessen:2011:QLT

[462] Koen Claessen and John Hughes. QuickCheck: a lightweight tool for random testing of Haskell programs. *ACM SIGPLAN Notices*, 46(4):53–64, April 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Arnold:2011:AOJ

[463] Matthew Arnold, Stephen Fink, David Grove, Michael Hind, and Peter F. Sweeney. Adaptive optimization in the Jalapeno JVM. *ACM SIGPLAN Notices*, 46(4):65–83, April 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Ishtiaq:2011:BAL

[464] Samin Ishtiaq and Peter W. O'Hearn. BI as an assertion language for mutable data structures. *ACM SIGPLAN Notices*, 46(4):84–96, April 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Virlet:2011:SSB

[465] Bruno Virlet, Xing Zhou, Jean Pierre Giacalone, Bob Kuhn, Maria J. Garzaran, and David Padua. Scheduling of stream-based real-time applications for heterogeneous systems. *ACM*

SIGPLAN Notices, 46(5):1–10, May 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Chattopadhyay:2011:SBS

[466] Sudipta Chattopadhyay and Abhik Roychoudhury. Static bus schedule aware scratchpad allocation in multiprocessors. *ACM SIGPLAN Notices*, 46(5):11–20, May 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Albert:2011:TLA

[467] Elvira Albert, Puri Arenas, Samir Genaim, and Damiano Zanardini. Task-level analysis for a language with async/finish parallelism. *ACM SIGPLAN Notices*, 46(5):21–30, May 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Chang:2011:LCW

[468] Li-Pin Chang and Li-Chun Huang. A low-cost wear-leveling algorithm for block-mapping solid-state disks. *ACM SIGPLAN Notices*, 46(5):31–40, May 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Saha:2011:AIS

[469] Suman Saha, Julia Lawall, and Gilles Muller. An approach to improving the structure of error-handling code in the Linux kernel. *ACM SIGPLAN Notices*, 46(5):41–50, May 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Gray:2011:TCE

[470] Ian Gray and Neil C. Audsley. Targeting complex embedded architectures by combining the multicore communications API (`mcapi`) with compile-time virtualisation. *ACM SIGPLAN Notices*, 46(5):51–60, May 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Benveniste:2011:DRT

[471] Albert Benveniste, Timothy Bourke, Benoît Caillaud, and Marc Pouzet. Divide and recycle: types and compilation for a hybrid synchronous language. *ACM SIGPLAN Notices*, 46(5):61–70, May 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Gamatie:2011:SAS

[472] Abdoulaye Gamatie and Laure Gonnord. Static analysis of synchronous programs in signal for efficient design of multi-clocked embedded systems. *ACM SIGPLAN Notices*, 46(5):71–80, May 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Berthier:2011:SPD

[473] Nicolas Berthier, Florence Maraninchi, and Laurent Mounier. Synchronous programming of device drivers for global resource control in embedded operating systems. *ACM SIGPLAN Notices*, 46(5):81–90, May 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Wang:2011:DBM

[474] Man Wang, Zhiyuan Li, Feng Li, Xiaobing Feng, Saurabh Bagchi, and Yung-Hsiang Lu. Dependence-based multi-level tracing and replay for wireless sensor networks debugging. *ACM SIGPLAN Notices*, 46(5):91–100, May 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Thomas:2011:LOS

[475] Johnson J. Thomas, Sebastian Fischmeister, and Deepak Kumar. Lowering overhead in sampling-based execution monitoring and tracing. *ACM SIGPLAN Notices*, 46(5):101–110, May 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Navabpour:2011:SDT

[476] Samaneh Navabpour, Borzoo Bonakdarpour, and Sebastian Fischmeister. Software debugging and testing using the abstract diagnosis theory. *ACM SIGPLAN Notices*, 46(5):111–120, May 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Cullmann:2011:CPA

[477] Christoph Cullmann. Cache persistence analysis: a novel approachtheory and practice. *ACM SIGPLAN Notices*, 46(5):121–130, May 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Sarkar:2011:PTM

[478] Abhik Sarkar, Frank Mueller, and Harini Ramaprasad. Predictable task migration for locked caches in multicore systems. *ACM SIGPLAN Notices*, 46(5):131–140, May 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Althaus:2011:PEP

[479] Ernst Althaus, Sebastian Altmeyer, and Rouven Naujoks. Precise and efficient parametric path analysis. *ACM SIGPLAN Notices*, 46(5):141–150, May 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Jang:2011:ISA

[480] Choonki Jang, Jungwon Kim, Jaejin Lee, Hee-Seok Kim, Dong-Hoon Yoo, Sukjin Kim, Hong-Seok Kim, and Soojung Ryu. An instruction-scheduling-aware data partitioning technique for coarse-grained reconfigurable architectures. *ACM SIGPLAN Notices*, 46 (5):151–160, May 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Bhagat:2011:GPP

[481] Indu Bhagat, Enric Gibert, Jesús Sánchez, and Antonio González. Global productiveness propagation: a code optimization technique to speculatively prune useless narrow computations. *ACM SIGPLAN Notices*, 46(5):161–170, May 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Prabhu:2011:CSL

[482] Prakash Prabhu, Soumyadeep Ghosh, Yun Zhang, Nick P. Johnson, and David I. August. Commutative set: a

language extension for implicit parallel programming. *ACM SIGPLAN Notices*, 46(6):1–11, June 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Pingali:2011:TPA

[483] Keshav Pingali, Donald Nguyen, Milind Kulkarni, Martin Burtscher, M. Amber Hassaan, Rashid Kaleem, Tsung-Hsien Lee, Andrew Lenharth, Roman Manevich, Mario Méndez-Lojo, Dimitrios Prountzos, and Xin Sui. The tao of parallelism in algorithms. *ACM SIGPLAN Notices*, 46(6):12–25, June 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Raman:2011:POU

[484] Arun Raman, Hanjun Kim, Taewook Oh, Jae W. Lee, and David I. August. Parallelism orchestration using DoPE: the degree of parallelism executive. *ACM SIGPLAN Notices*, 46 (6):26–37, June 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Hawkins:2011:DRS

[485] Peter Hawkins, Alex Aiken, Kathleen Fisher, Martin Rinard, and Mooly Sagiv. Data representation synthesis. *ACM SIGPLAN Notices*, 46(6):38–49, June 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Gulwani:2011:SGC

[486] Sumit Gulwani, Vijay Anand Korthikanti, and Ashish Tiwari. Synthesizing geometry constructions. *ACM SIGPLAN Notices*, 46(6):50–61, June 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Gulwani:2011:SLF

[487] Sumit Gulwani, Susmit Jha, Ashish Tiwari, and Ramarathnam Venkatesan. Synthesis of loop-free programs. *ACM SIGPLAN Notices*, 46(6):62–73, June 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Bohm:2011:GJT

[488] Igor Böhm, Tobias J. K. Edler von Koch, Stephen C. Kyle, Björn Franke, and Nigel Topham. Generalized just-in-time trace compilation using a parallel task farm in a dynamic binary translator. *ACM SIGPLAN Notices*, 46(6):74–85, June 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Jung:2011:BES

[489] Changhee Jung, Silvius Rus, Brian P. Railing, Nathan Clark, and Santosh Pande. Brainy: effective selection of data structures. *ACM SIGPLAN Notices*, 46(6):86–97, June 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Zhou:2011:SBA

[490] Hucheng Zhou, Wenguang Chen, and Fred Chow. An SSA-based algorithm for optimal speculative code motion under an execution profile. *ACM SIGPLAN Notices*, 46(6):98–108, June 2011. CODEN SINODQ. ISSN 0362-

1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Li:2011:CHD

[491] Xun Li, Mohit Tiwari, Jason K. Oberg, Vineeth Kashyap, Frederic T. Chong, Timothy Sherwood, and Ben Hardekopf. Caisson: a hardware description language for secure information flow. *ACM SIGPLAN Notices*, 46(6): 109–120, June 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Murray:2011:SAO

[492] Derek Gordon Murray, Michael Isard, and Yuan Yu. Steno: automatic optimization of declarative queries. *ACM SIGPLAN Notices*, 46 (6):121–131, June 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Tobin-Hochstadt:2011:LL

[493] Sam Tobin-Hochstadt, Vincent St-Amour, Ryan Culpepper, Matthew Flatt, and Matthias Felleisen. Languages as libraries. *ACM SIGPLAN Notices*, 46(6):132–141, June 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Jablin:2011:ACG

[494] Thomas B. Jablin, Prakash Prabhu, James A. Jablin, Nick P. Johnson, Stephen R. Beard, and David I. August. Automatic CPU–GPU communication management and optimization. *ACM SIGPLAN Notices*, 46(6): 142–151, June 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Prasad:2011:ACM

[495] Ashwin Prasad, Jayvant Anantpur, and R. Govindarajan. Automatic compilation of MATLAB programs for synergistic execution on heterogeneous processors. *ACM SIGPLAN Notices*, 46(6):152–163, June 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Sampson:2011:EAD

[496] Adrian Sampson, Werner Dietl, Emily Fortuna, Danushen Gnanapragasam, Luis Ceze, and Dan Grossman. EnerJ: approximate data types for safe and general low-power computation. *ACM SIGPLAN Notices*, 46(6):164–174, June 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Sarkar:2011:UPM

[497] Susmit Sarkar, Peter Sewell, Jade Alglave, Luc Maranget, and Derek Williams. Understanding POWER multiprocessors. *ACM SIGPLAN Notices*, 46(6):175–186, June 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Kuperstein:2011:PCA

[498] Michael Kuperstein, Martin Vechev, and Eran Yahav. Partial-coherence abstractions for relaxed memory models. *ACM SIGPLAN Notices*, 46(6): 187–198, June 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Marino:2011:CSP

[499] Daniel Marino, Abhayendra Singh, Todd Millstein, Madanlal Musuvathi, and Satish Narayanasamy. A case for an SC-preserving compiler. *ACM SIGPLAN Notices*, 46(6):199–210, June 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Beckman:2011:PMS

[500] Nels E. Beckman and Aditya V. Nori. Probabilistic, modular and scalable inference of typestate specifications. *ACM SIGPLAN Notices*, 46(6): 211–221, June 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Kobayashi:2011:PAC

[501] Naoki Kobayashi, Ryosuke Sato, and Hiroshi Unno. Predicate abstraction and CEGAR for higher-order model checking. *ACM SIGPLAN Notices*, 46 (6):222–233, June 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Chlipala:2011:MAV

[502] Adam Chlipala. Mostly-automated verification of low-level programs in computational separation logic. *ACM SIGPLAN Notices*, 46(6):234–245, June 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Lee:2011:TGR

[503] Kyu Hyung Lee, Yunhui Zheng, Nick Sumner, and Xiangyu Zhang. Toward generating reducible replay logs. *ACM SIGPLAN Notices*, 46(6):246–257, June 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Godefroid:2011:HOT

[504] Patrice Godefroid. Higher-order test generation. *ACM SIGPLAN Notices*, 46(6):258–269, June 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Xu:2011:LHP

[505] Guoqing Xu, Michael D. Bond, Feng Qin, and Atanas Rountev. LeakChaser: helping programmers narrow down causes of memory leaks. *ACM SIGPLAN Notices*, 46(6):270–282, June 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Yang:2011:FUB

[506] Xuejun Yang, Yang Chen, Eric Eide, and John Regehr. Finding and understanding bugs in C compilers. *ACM SIGPLAN Notices*, 46(6):283–294, June 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Tristan:2011:EVG

[507] Jean-Baptiste Tristan, Paul Govereau, and Greg Morrisett. Evaluating value-graph translation validation for LLVM. *ACM SIGPLAN Notices*, 46(6):295–305, June 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Sevcik:2011:SOS

[508] Jaroslav Sevcík. Safe optimisations for shared-memory concurrent programs. *ACM SIGPLAN Notices*, 46 (6):306–316, June 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Harris:2011:STT

[509] William R. Harris and Sumit Gulwani. Spreadsheet table transformations from examples. *ACM SIGPLAN Notices*, 46(6):317–328, June 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Meng:2011:SEG

[510] Na Meng, Miryung Kim, and Kathryn S. McKinley. Systematic editing: generating program transformations from an example. *ACM SIGPLAN Notices*, 46 (6):329–342, June 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Srivastava:2011:SPO

[511] Varun Srivastava, Michael D. Bond, Kathryn S. McKinley, and Vitaly Shmatikov. A security policy oracle: detecting security holes using multiple API implementations. *ACM SIGPLAN Notices*, 46(6):343–354, June 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Ansel:2011:LIS

[512] Jason Ansel, Petr Marchenko, Ulfar Erlingsson, Elijah Taylor, Brad Chen, Derek L. Schuff, David Sehr, Cliff L. Biffle, and Bennet Yee. Language-independent sandboxing of just-in-time compilation and self-modifying code. *ACM SIGPLAN Notices*, 46(6):355–366, June 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Zeng:2011:CCH

[513] Qiang Zeng, Dinghao Wu, and Peng Liu. Cruiser: concurrent heap buffer overflow monitoring using lock-free data structures. *ACM SIGPLAN Notices*, 46(6):367–377, June 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Lucia:2011:IUC

[514] Brandon Lucia, Benjamin P. Wood, and Luis Ceze. Isolating and understanding concurrency errors using reconstructed execution fragments. *ACM SIGPLAN Notices*, 46(6):378–388, June 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Jin:2011:AAV

[515] Guoliang Jin, Linhai Song, Wei Zhang, Shan Lu, and Ben Liblit. Automated atomicity-violation fixing. *ACM SIGPLAN Notices*, 46(6):389–400, June 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Burnim:2011:NRC

[516] Jacob Burnim, Tayfun Elmas, George Necula, and Koushik Sen. NDSeq: runtime checking for nondeterministic sequential specifications of parallel correctness. *ACM SIGPLAN Notices*, 46

(6):401–414, June 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Jin:2011:GCM

[517] Dongyun Jin, Patrick O'Neil Meredith, Dennis Griffith, and Grigore Rosu. Garbage collection for monitoring parametric properties. *ACM SIGPLAN Notices*, 46(6):415–424, June 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Parr:2011:LFA

[518] Terence Parr and Kathleen Fisher. LL(*): the foundation of the ANTLR parser generator. *ACM SIGPLAN Notices*, 46(6):425–436, June 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Jose:2011:CCC

[519] Manu Jose and Rupak Majumdar. Cause clue clauses: error localization using maximum satisfiability. *ACM SIGPLAN Notices*, 46(6):437–446, June 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Budi:2011:AMA

[520] Aditya Budi, David Lo, Lingxiao Jiang, and Lucia. *kb*-anonymity: a model for anonymized behaviour-preserving test and debugging data. *ACM SIGPLAN Notices*, 46(6):447–457, June 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Garcia:2011:KRR

[521] Saturnino Garcia, Donghwan Jeon, Christopher M. Louie, and Michael Bedford Taylor. Kremlin: rethinking and rebooting `gprof` for the multicore age. *ACM SIGPLAN Notices*, 46(6): 458–469, June 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Sato:2011:APM

[522] Shigeyuki Sato and Hideya Iwasaki. Automatic parallelization via matrix multiplication. *ACM SIGPLAN Notices*, 46(6):470–479, June 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Udupa:2011:AEB

[523] Abhishek Udupa, Kaushik Rajan, and William Thies. ALTER: exploiting breakable dependences for parallelization. *ACM SIGPLAN Notices*, 46(6): 480–491, June 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Srivastava:2011:PBI

[524] Saurabh Srivastava, Sumit Gulwani, Swarat Chaudhuri, and Jeffrey S. Foster. Path-based inductive synthesis for program inversion. *ACM SIGPLAN Notices*, 46(6):492–503, June 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Person:2011:DIS

[525] Suzette Person, Guowei Yang, Neha Rungta, and Sarfraz Khurshid. Directed incremental symbolic execution. *ACM SIGPLAN Notices*, 46(6):

504–515, June 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

DElia:2011:MHC

[526] Daniele Cono D'Elia, Camil Demetrescu, and Irene Finocchi. Mining hot calling contexts in small space. *ACM SIGPLAN Notices*, 46(6):516–527, June 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Kim:2011:VSC

[527] Deokhwan Kim and Martin C. Rinard. Verification of semantic commutativity conditions and inverse operations on linked data structures. *ACM SIGPLAN Notices*, 46(6):528–541, June 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Kulkarni:2011:ECL

[528] Milind Kulkarni, Donald Nguyen, Dimitrios Prountzos, Xin Sui, and Keshav Pingali. Exploiting the commutativity lattice. *ACM SIGPLAN Notices*, 46 (6):542–555, June 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Perez:2011:SLS

[529] Juan Antonio Navarro Pérez and Andrey Rybalchenko. Separation logic + superposition calculus = heap theorem prover. *ACM SIGPLAN Notices*, 46 (6):556–566, June 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Dillig:2011:PCM

[530] Isil Dillig, Thomas Dillig, Alex Aiken, and Mooly Sagiv. Precise and compact modular procedure summaries for heap manipulating programs. *ACM SIGPLAN Notices*, 46(6):567–577, June 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Bouajjani:2011:IPA

[531] Ahmed Bouajjani, Cezara Dragoi, Constantin Enea, and Mihaela Sighireanu. On inter-procedural analysis of programs with lists and data. *ACM SIGPLAN Notices*, 46(6):578–589, June 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Liang:2011:SAR

[532] Percy Liang and Mayur Naik. Scaling abstraction refinement via pruning. *ACM SIGPLAN Notices*, 46(6): 590–601, June 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Altidor:2011:TWC

[533] John Altidor, Shan Shan Huang, and Yannis Smaragdakis. Taming the wildcards: combining definition- and use-site variance. *ACM SIGPLAN Notices*, 46(6):602–613, June 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Tate:2011:TWJ

[534] Ross Tate, Alan Leung, and Sorin Lerner. Taming wildcards in Java's type system. *ACM SIGPLAN Notices*,

46(6):614–627, June 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Ziarek:2011:CAE

[535] Lukasz Ziarek, KC Sivaramakrishnan, and Suresh Jagannathan. Composable asynchronous events. *ACM SIGPLAN Notices*, 46(6):628–639, June 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Best:2011:SST

[536] Micah J. Best, Shane Mottishaw, Craig Mustard, Mark Roth, Alexandra Fedorova, and Andrew Brownsword. Synchronization via scheduling: techniques for efficiently managing shared state. *ACM SIGPLAN Notices*, 46(6): 640–652, June 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Bacon:2011:VAH

[537] David F. Bacon. Virtualization in the age of heterogeneous machines. *ACM SIGPLAN Notices*, 46(7):1–2, July 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Du:2011:PPV

[538] Jiaqing Du, Nipun Sehrawat, and Willy Zwaenepoel. Performance profiling of virtual machines. *ACM SIGPLAN Notices*, 46(7):3–14, July 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Nikolaev:2011:PXF

[539] Ruslan Nikolaev and Godmar Back. Perfctr-Xen: a framework for performance counter virtualization. *ACM SIGPLAN Notices*, 46(7):15–26, July 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Zhao:2011:DCC

[540] Qin Zhao, David Koh, Syed Raza, Derek Bruening, Weng-Fai Wong, and Saman Amarasinghe. Dynamic cache contention detection in multi-threaded applications. *ACM SIGPLAN Notices*, 46(7):27–38, July 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Wang:2011:RVM

[541] Kun Wang, Jia Rao, and Cheng-Zhong Xu. Rethink the virtual machine template. *ACM SIGPLAN Notices*, 46 (7):39–50, July 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Cecchet:2011:DVD

[542] Emmanuel Cecchet, Rahul Singh, Upendra Sharma, and Prashant Shenoy. Dolly: virtualization-driven database provisioning for the cloud. *ACM SIGPLAN Notices*, 46(7):51–62, July 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Le:2011:REV

[543] Michael Le and Yuval Tamir. ReHype: enabling VM survival across hypervisor failures. *ACM SIGPLAN Notices*,

46(7):63–74, July 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Park:2011:FSE

[544] Eunbyung Park, Bernhard Egger, and Jaejin Lee. Fast and space-efficient virtual machine checkpointing. *ACM SIGPLAN Notices*, 46(7):75–86, July 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Zhang:2011:FRC

[545] Irene Zhang, Alex Garthwaite, Yury Baskakov, and Kenneth C. Barr. Fast restore of checkpointed memory using working set estimation. *ACM SIGPLAN Notices*, 46(7):87–98, July 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Kourai:2011:FCP

[546] Kenichi Kourai. Fast and correct performance recovery of operating systems using a virtual machine monitor. *ACM SIGPLAN Notices*, 46(7):99–110, July 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Svard:2011:EDC

[547] Petter Svärd, Benoit Hudzia, Johan Tordsson, and Erik Elmroth. Evaluation of delta compression techniques for efficient live migration of large virtual machines. *ACM SIGPLAN Notices*, 46 (7):111–120, July 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Wood:2011:CDP

[548] Timothy Wood, K. K. Ramakrishnan, Prashant Shenoy, and Jacobus van der Merwe. CloudNet: dynamic pooling of cloud resources by live WAN migration of virtual machines. *ACM SIGPLAN Notices*, 46(7):121–132, July 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Zheng:2011:WAL

[549] Jie Zheng, Tze Sing Eugene Ng, and Kunwadee Sripanidkulchai. Workload-aware live storage migration for clouds. *ACM SIGPLAN Notices*, 46(7):133–144, July 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Litty:2011:PAI

[550] Lionel Litty and David Lie. Patch auditing in infrastructure as a service clouds. *ACM SIGPLAN Notices*, 46 (7):145–156, July 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Payer:2011:FGU

[551] Mathias Payer and Thomas R. Gross. Fine-grained user-space security through virtualization. *ACM SIGPLAN Notices*, 46(7):157–168, July 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Lange:2011:MOV

[552] John R. Lange, Kevin Pedretti, Peter Dinda, Patrick G. Bridges, Chang Bae, Philip Soltero, and Alexander Merritt. Minimal-overhead virtualization

of a large scale supercomputer. *ACM SIGPLAN Notices*, 46(7):169–180, July 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Xia:2011:VWB

[553] Lei Xia, Sanjay Kumar, Xue Yang, Praveen Gopalakrishnan, York Liu, Sebastian Schoenberg, and Xingang Guo. Virtual WiFi: bring virtualization from wired to wireless. *ACM SIGPLAN Notices*, 46(7):181–192, July 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Lange:2011:SSV

[554] John R. Lange and Peter Dinda. SymCall: symbiotic virtualization through VMM-to-guest upcalls. *ACM SIGPLAN Notices*, 46(7):193–204, July 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Williams:2011:OHM

[555] Dan Williams, Hani Jamjoom, Yew-Huey Liu, and Hakim Weatherspoon. Overdriver: handling memory overload in an oversubscribed cloud. *ACM SIGPLAN Notices*, 46(7):205–216, July 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Wang:2011:SHS

[556] Xiaolin Wang, Jiarui Zang, Zhenlin Wang, Yingwei Luo, and Xiaoming Li. Selective hardware/software memory virtualization. *ACM SIGPLAN Notices*, 46(7):217–226, July 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Roy:2011:HBR

[557] Amitabha Roy, Steven Hand, and Tim Harris. Hybrid binary rewriting for memory access instrumentation. *ACM SIGPLAN Notices*, 46(7):227–238, July 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Larus:2011:PC

[558] James R. Larus. Programming the cloud. *ACM SIGPLAN Notices*, 46 (8):1–2, August 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PPoPP '11 Conference proceedings.

Hassaan:2011:OVU

[559] Muhammad Amber Hassaan, Martin Burtscher, and Keshav Pingali. Ordered vs. unordered: a comparison of parallelism and work-efficiency in irregular algorithms. *ACM SIGPLAN Notices*, 46(8):3–12, August 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PPoPP '11 Conference proceedings.

Bauer:2011:PMH

[560] Michael Bauer, John Clark, Eric Schkufza, and Alex Aiken. Programming the memory hierarchy revisited: supporting irregular parallelism in Sequoia. *ACM SIGPLAN Notices*, 46 (8):13–24, August 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PPoPP '11 Conference proceedings.

Murarasu:2011:CDS

[561] Alin Murarasu, Josef Weidendorfer, Gerrit Buse, Daniel Butnaru, and Dirk Pflüger. Compact data structure and scalable algorithms for the sparse grid technique. *ACM SIGPLAN Notices*, 46 (8):25–34, August 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PPoPP '11 Conference proceedings.

Chafi:2011:DSA

[562] Hassan Chafi, Arvind K. Sujeeth, Kevin J. Brown, HyoukJoong Lee, Anand R. Atreya, and Kunle Olukotun. A domain-specific approach to heterogeneous parallelism. *ACM SIGPLAN Notices*, 46(8):35–46, August 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PPoPP '11 Conference proceedings.

Catanzaro:2011:CCE

[563] Bryan Catanzaro, Michael Garland, and Kurt Keutzer. Copperhead: compiling an embedded data parallel language. *ACM SIGPLAN Notices*, 46 (8):47–56, August 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PPoPP '11 Conference proceedings.

Jenista:2011:OSO

[564] James Christopher Jenista, Yong hun Eom, and Brian Charles Demsky. OoOJava: software out-of-order execution. *ACM SIGPLAN Notices*, 46(8):57–68, August 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PPoPP '11 Conference proceedings.

Feng:2011:SSP

[565] Min Feng, Rajiv Gupta, and Yi Hu. SpiceC: scalable parallelism via implicit copying and explicit commit. *ACM SIGPLAN Notices*, 46(8):69–80, August 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PPoPP '11 Conference proceedings.

Negara:2011:IOT

[566] Stas Negara, Rajesh K. Karmani, and Gul Agha. Inferring ownership transfer for efficient message passing. *ACM SIGPLAN Notices*, 46(8):81–90, August 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PPoPP '11 Conference proceedings.

Xiang:2011:AWP

[567] Xiaoya Xiang, Bin Bao, Tongxin Bai, Chen Ding, and Trishul Chilimbi. All-window profiling and composable models of cache sharing. *ACM SIGPLAN Notices*, 46(8):91–102, August 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PPoPP '11 Conference proceedings.

Ding:2011:UUL

[568] Xiaoning Ding, Kaibo Wang, and Xiaodong Zhang. ULCC: a user-level facility for optimizing shared cache performance on multicores. *ACM SIGPLAN Notices*, 46(8):103–112, August 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PPoPP '11 Conference proceedings.

Wu:2011:STB

[569] Xing Wu and Frank Mueller. ScalaExtrap: trace-based communication extrapolation for SPMD programs. *ACM SIGPLAN Notices*, 46(8):113–122, August 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PPoPP '11 Conference proceedings.

McKinley:2011:HPC

[570] Kathryn S. McKinley. How's the parallel computing revolution going? *ACM SIGPLAN Notices*, 46(8):123–124, August 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PPoPP '11 Conference proceedings.

Karmani:2011:TCS

[571] Rajesh K. Karmani, P. Madhusudan, and Brandon M. Moore. Thread contracts for safe parallelism. *ACM SIGPLAN Notices*, 46(8):125–134, August 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PPoPP '11 Conference proceedings.

Zheng:2011:GLO

[572] Mai Zheng, Vignesh T. Ravi, Feng Qin, and Gagan Agrawal. GRace: a low-overhead mechanism for detecting data races in GPU programs. *ACM SIGPLAN Notices*, 46(8):135–146, August 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PPoPP '11 Conference proceedings.

Yi:2011:CRP

[573] Jaeheon Yi, Caitlin Sadowski, and Cormac Flanagan. Cooperative reasoning for preemptive execution. *ACM SIGPLAN Notices*, 46(8):147–156, August 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PPoPP '11 Conference proceedings.

Lesani:2011:CMT

[574] Mohsen Lesani and Jens Palsberg. Communicating memory transactions. *ACM SIGPLAN Notices*, 46(8):157–168, August 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PPoPP '11 Conference proceedings.

Luchangco:2011:TCE

[575] Victor Luchangco and Virendra J. Marathe. Transaction communicators: enabling cooperation among concurrent transactions. *ACM SIGPLAN Notices*, 46(8):169–178, August 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PPoPP '11 Conference proceedings.

Fernandes:2011:LFS

[576] Sérgio Miguel Fernandes and João Cachopo. Lock-free and scalable multi-version software transactional memory. *ACM SIGPLAN Notices*, 46(8):179–188, August 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PPoPP '11 Conference proceedings.

Tian:2011:ESP

[577] Chen Tian, Changhui Lin, Min Feng, and Rajiv Gupta. Enhanced speculative parallelization via incremental recovery. *ACM SIGPLAN Notices*, 46(8):

189–200, August 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PPoPP '11 Conference proceedings.

Saraswat:2011:LBG

[578] Vijay A. Saraswat, Prabhanjan Kambadur, Sreedhar Kodali, David Grove, and Sriram Krishnamoorthy. Lifeline-based global load balancing. *ACM SIGPLAN Notices*, 46(8):201–212, August 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PPoPP '11 Conference proceedings.

Wang:2011:CSP

[579] Zhaoguo Wang, Ran Liu, Yufei Chen, Xi Wu, Haibo Chen, Weihua Zhang, and Binyu Zang. COREMU: a scalable and portable parallel full-system emulator. *ACM SIGPLAN Notices*, 46(8): 213–222, August 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PPoPP '11 Conference proceedings.

Kogan:2011:WFQ

[580] Alex Kogan and Erez Petrank. Wait-free queues with multiple enqueuers and dequeuers. *ACM SIGPLAN Notices*, 46(8):223–234, August 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PPoPP '11 Conference proceedings.

Tanase:2011:SPC

[581] Gabriel Tanase, Antal Buss, Adam Fidel, Harshvardhan Harshvardhan, Ioannis Papadopoulos, Olga Pearce, Timmie Smith, Nathan Thomas, Xiabing Xu, Nedal Mourad, Jeremy Vu, Mauro Bianco, Nancy M. Amato, and Lawrence Rauchwerger. The STAPL parallel container framework. *ACM SIGPLAN Notices*, 46(8):235–246, August 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PPoPP '11 Conference proceedings.

Kourtis:2011:CEC

[582] Kornilios Kourtis, Vasileios Karakasis, Georgios Goumas, and Nectarios Koziris. CSX: an extended compression format for SpMV on shared memory systems. *ACM SIGPLAN Notices*, 46(8):247–256, August 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PPoPP '11 Conference proceedings.

Dotsenko:2011:ATF

[583] Yuri Dotsenko, Sara S. Baghsorkhi, Brandon Lloyd, and Naga K. Govindaraju. Auto-tuning of Fast Fourier Transform on graphics processors. *ACM SIGPLAN Notices*, 46(8):257–266, August 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PPoPP '11 Conference proceedings.

Hong:2011:ACG

[584] Sungpack Hong, Sang Kyun Kim, Tayo Oguntebi, and Kunle Olukotun. Accelerating CUDA graph algorithms at maximum warp. *ACM SIGPLAN Notices*, 46(8):267–276, August 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PPoPP '11 Conference proceedings.

Kim:2011:ASC

[585] Jungwon Kim, Honggyu Kim, Joo Hwan Lee, and Jaejin Lee. Achieving a single compute device image in OpenCL for multiple GPUs. *ACM SIGPLAN Notices*, 46(8):277–288, August 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PPoPP '11 Conference proceedings.

Prabhakar:2011:QAS

[586] Ramya Prabhakar, Shekhar Srikantaiah, Rajat Garg, and Mahmut Kandemir. QoS aware storage cache management in multi-server environments. *ACM SIGPLAN Notices*, 46(8):289–290, August 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PPoPP '11 Conference proceedings.

Roy:2011:WAU

[587] Amitabha Roy, Steven Hand, and Tim Harris. Weak atomicity under the x86 memory consistency model. *ACM SIGPLAN Notices*, 46(8):291–292, August 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PPoPP '11 Conference proceedings.

Jeon:2011:KLG

[588] Donghwan Jeon, Saturnino Garcia, Chris Louie, Sravanthi Kota Venkata, and Michael Bedford Taylor. Kremlin: like `gprof`, but for parallelization. *ACM SIGPLAN Notices*, 46(8):293–294, August 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PPoPP '11 Conference proceedings.

Strzodka:2011:TSM

[589] Robert Strzodka, Mohammed Shaheen, and Dawid Pajak. Time skewing made simple. *ACM SIGPLAN Notices*, 46(8):295–296, August 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PPoPP '11 Conference proceedings.

Grosset:2011:EGC

[590] Andre Vincent Pascal Grosset, Peihong Zhu, Shusen Liu, Suresh Venkatasubramanian, and Mary Hall. Evaluating graph coloring on GPUs. *ACM SIGPLAN Notices*, 46(8):297–298, August 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PPoPP '11 Conference proceedings.

Ding:2011:TEP

[591] Chen Ding. Two examples of parallel programming without concurrency constructs (PP-CC). *ACM SIGPLAN Notices*, 46(8):299–300, August 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PPoPP '11 Conference proceedings.

Stellwag:2011:WFN

[592] Philippe Stellwag, Fabian Scheler, Jakob Krainz, and Wolfgang Schröder-Preikschat. A wait-free NCAS library for parallel applications with timing constraints. *ACM SIGPLAN Notices*, 46(8):301–302, August 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PPoPP '11 Conference proceedings.

Davies:2011:ABR

[593] Teresa Davies, Zizhong Chen, Christer Karlsson, and Hui Liu. Algorithm-based recovery for HPL. *ACM SIGPLAN Notices*, 46(8):303–304, August 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PPoPP '11 Conference proceedings.

Willcock:2011:APP

[594] Jeremiah James Willcock, Torsten Hoefler, Nicholas Gerard Edmonds, and Andrew Lumsdaine. Active Pebbles: a programming model for highly parallel fine-grained data-driven computations. *ACM SIGPLAN Notices*, 46(8):305–306, August 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PPoPP '11 Conference proceedings.

Fischer:2011:SMC

[595] Topher Fischer, Eric Mercer, and Neha Rungta. Symbolically modeling concurrent MCAPI executions. *ACM SIGPLAN Notices*, 46(8):307–308, August 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PPoPP '11 Conference proceedings.

Siegel:2011:AFV

[596] Stephen F. Siegel and Timothy K. Zirkel. Automatic formal verification of MPI-based parallel programs. *ACM SIGPLAN Notices*, 46(8):309–310, August 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PPoPP '11 Conference proceedings.

Donaldson:2011:STA

[597] Alastair F. Donaldson, Daniel Kroening, and Philipp Ruemmer. SCRATCH: a tool for automatic analysis of DMA races. *ACM SIGPLAN Notices*, 46(8): 311–312, August 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PPoPP '11 Conference proceedings.

Botincan:2011:ASP

[598] Matko Botincan, Mike Dodds, Alastair F. Donaldson, and Matthew J. Parkinson. Automatic safety proofs for asynchronous memory operations. *ACM SIGPLAN Notices*, 46(8):313–314, August 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PPoPP '11 Conference proceedings.

Filinski:2011:TCT

[599] Andrzej Filinski. Towards a comprehensive theory of monadic effects. *ACM SIGPLAN Notices*, 46(9):1, September 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). ICFP '11 conference proceedings.

Gibbons:2011:JDI

[600] Jeremy Gibbons and Ralf Hinze. Just do it: simple monadic equational reasoning. *ACM SIGPLAN Notices*, 46(9): 2–14, September 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). ICFP '11 conference proceedings.

Swamy:2011:LMP

[601] Nikhil Swamy, Nataliya Guts, Daan Leijen, and Michael Hicks. Lightweight

monadic programming in ML. *ACM SIGPLAN Notices*, 46(9):15–27, September 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). ICFP '11 conference proceedings.

Mitchell:2011:FPT

[602] Emily G. Mitchell. Functional programming through deep time: modeling the first complex ecosystems on Earth. *ACM SIGPLAN Notices*, 46(9): 28–31, September 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). ICFP '11 conference proceedings.

Schrijvers:2011:MZV

[603] Tom Schrijvers and Bruno C. d. S. Oliveira. Monads, zippers and views: virtualizing the monad stack. *ACM SIGPLAN Notices*, 46(9):32–44, September 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). ICFP '11 conference proceedings.

Krishnaswami:2011:SMG

[604] Neelakantan R. Krishnaswami and Nick Benton. A semantic model for graphical user interfaces. *ACM SIGPLAN Notices*, 46(9):45–57, September 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). ICFP '11 conference proceedings.

Shivers:2011:MRT

[605] Olin Shivers and Aaron J. Turon. Modular rollback through control logging: a pair of twin functional pearls. *ACM SIGPLAN Notices*, 46(9):58–68, September 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). ICFP '11 conference proceedings.

Vardoulakis:2011:PFA

[606] Dimitrios Vardoulakis and Olin Shivers. Pushdown flow analysis of first-class control. *ACM SIGPLAN Notices*, 46(9):69–80, September 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). ICFP '11 conference proceedings.

Materzok:2011:SDC

[607] Marek Materzok and Dariusz Biernacki. Subtyping delimited continuations. *ACM SIGPLAN Notices*, 46(9): 81–93, September 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). ICFP '11 conference proceedings.

Castagna:2011:STF

[608] Giuseppe Castagna and Zhiwu Xu. Set-theoretic foundation of parametric polymorphism and subtyping. *ACM SIGPLAN Notices*, 46(9):94–106, September 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). ICFP '11 conference proceedings.

Gesbert:2011:PPS

[609] Nils Gesbert, Pierre Genevès, and Nabil Layaïda. Parametric polymorphism and semantic subtyping: the logical connection. *ACM SIGPLAN Notices*, 46(9):107–116, September 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). ICFP '11 conference proceedings.

Morihata:2011:BTI

[610] Akimasa Morihata and Kiminori Matsuzaki. Balanced trees inhabiting functional parallel programming. *ACM SIGPLAN Notices*, 46(9):117–128, September 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). ICFP '11 conference proceedings.

Chen:2011:ISA

[611] Yan Chen, Joshua Dunfield, Matthew A. Hammer, and Umut A. Acar. Implicit self-adjusting computation for purely functional programs. *ACM SIGPLAN Notices*, 46(9):129–141, September 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). ICFP '11 conference proceedings.

Takeyama:2011:PAC

[612] Makoto Takeyama. Programming assurance cases in Agda. *ACM SIGPLAN Notices*, 46(9):142, September 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). ICFP '11 conference proceedings.

Devriese:2011:BST

[613] Dominique Devriese and Frank Piessens. On the bright side of type classes: instance arguments in Agda. *ACM SIGPLAN Notices*, 46(9):143–155, September 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). ICFP '11 conference proceedings.

Magalhaes:2011:FMM

[614] José Pedro Magalhães and W. Bas de Haas. Functional modelling of musical harmony: an experience report. *ACM SIGPLAN Notices*, 46(9):156–162, September 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). ICFP '11 conference proceedings.

Gonthier:2011:HMA

[615] Georges Gonthier, Beta Ziliani, Aleksandar Nanevski, and Derek Dreyer. How to make ad hoc proof automation less ad hoc. *ACM SIGPLAN Notices*, 46(9):163–175, September 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). ICFP '11 conference proceedings.

Disney:2011:THO

[616] Tim Disney, Cormac Flanagan, and Jay McCarthy. Temporal higher-order contracts. *ACM SIGPLAN Notices*, 46(9):176–188, September 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). ICFP '11 conference proceedings.

Might:2011:PDF

[617] Matthew Might, David Darais, and Daniel Spiewak. Parsing with derivatives: a functional pearl. *ACM SIGPLAN Notices*, 46(9):189–195, September 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). ICFP '11 conference proceedings.

Ueno:2011:ENM

[618] Katsuhiro Ueno, Atsushi Ohori, and Toshiaki Otomo. An efficient non-moving garbage collector for functional languages. *ACM SIGPLAN No-*

tices, 46(9):196–208, September 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). ICFP '11 conference proceedings.

Gill:2011:DEF

[619] Andy Gill and Andrew Farmer. Deriving an efficient FPGA implementation of a low density parity check forward error corrector. *ACM SIGPLAN Notices*, 46(9):209–220, September 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). ICFP '11 conference proceedings.

Ghica:2011:GSIb

[620] Dan R. Ghica, Alex Smith, and Satnam Singh. Geometry of synthesis IV: compiling affine recursion into static hardware. *ACM SIGPLAN Notices*, 46(9):221–233, September 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). ICFP '11 conference proceedings.

Ahn:2011:HMS

[621] Ki Yung Ahn and Tim Sheard. A hierarchy of mendler style recursion combinators: taming inductive datatypes with negative occurrences. *ACM SIGPLAN Notices*, 46(9):234–246, September 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). ICFP '11 conference proceedings.

Jay:2011:TSI

[622] Barry Jay and Jens Palsberg. Typed self-interpretation by pattern matching. *ACM SIGPLAN Notices*, 46(9): 247–258, September 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). ICFP '11 conference proceedings.

Chyzak:2011:UCP

[623] Frédéric Chyzak and Alexis Darrasse. Using `camlp4` for presenting dynamic mathematics on the Web: DynaMoW, an OCaml language extension for the run-time generation of mathematical contents and their presentation on the Web. *ACM SIGPLAN Notices*, 46(9): 259–265, September 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). ICFP '11 conference proceedings.

Swamy:2011:SDP

[624] Nikhil Swamy, Juan Chen, Cédric Fournet, Pierre-Yves Strub, Karthikeyan Bhargavan, and Jean Yang. Secure distributed programming with value-dependent types. *ACM SIGPLAN Notices*, 46(9):266–278, September 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). ICFP '11 conference proceedings.

Foster:2011:FNP

[625] Nate Foster, Rob Harrison, Michael J. Freedman, Christopher Monsanto, Jennifer Rexford, Alec Story, and David Walker. Frenetic: a network programming language. *ACM SIGPLAN Notices*, 46(9):279–291, September 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). ICFP '11 conference proceedings.

Fisher:2011:FLT

[626] Kathleen Fisher, Nate Foster, David Walker, and Kenny Q. Zhu. Forest: a language and toolkit for programming with filestores. *ACM SIGPLAN Notices*, 46(9):292–306, September 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). ICFP '11 conference proceedings.

Ohori:2011:MSM

[627] Atsushi Ohori and Katsuhiro Ueno. Making Standard ML a practical database programming language. *ACM SIGPLAN Notices*, 46(9):307–319, September 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). ICFP '11 conference proceedings.

Pouillard:2011:NP

[628] Nicolas Pouillard. Nameless, painless. *ACM SIGPLAN Notices*, 46(9):320–332, September 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). ICFP '11 conference proceedings.

Weirich:2011:BU

[629] Stephanie Weirich, Brent A. Yorgey, and Tim Sheard. Binders unbound. *ACM SIGPLAN Notices*, 46(9):333–345, September 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). ICFP '11 conference proceedings.

Popescu:2011:RPS

[630] Andrei Popescu and Elsa L. Gunter. Recursion principles for syntax with bindings and substitution. *ACM SIGPLAN Notices*, 46(9):346–358, September 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). ICFP '11 conference proceedings.

Hinze:2011:PUF

[631] Ralf Hinze and Daniel W. H. James. Proving the unique fixed-point principle correct: an adventure with category theory. *ACM SIGPLAN Notices*, 46(9):359–371, September 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). ICFP '11 conference proceedings.

Gaboardi:2011:LPS

[632] Marco Gaboardi, Luca Paolini, and Mauro Piccolo. Linearity and PCF: a semantic insight! *ACM SIGPLAN Notices*, 46(9):372–384, September 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). ICFP '11 conference proceedings.

Mu:2011:GDT

[633] Shin-Cheng Mu and Akimasa Morihata. Generalising and dualising the third list-homomorphism theorem: functional pearl. *ACM SIGPLAN Notices*, 46(9):385–391, September 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). ICFP '11 conference proceedings.

Wang:2011:IUE

[634] Meng Wang, Jeremy Gibbons, and Nicolas Wu. Incremental updates for efficient bidirectional transformations.

ACM SIGPLAN Notices, 46(9):392–403, September 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). ICFP '11 conference proceedings.

Gotsman:2011:MVP

[635] Alexey Gotsman and Hongseok Yang. Modular verification of preemptive OS kernels. *ACM SIGPLAN Notices*, 46 (9):404–417, September 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). ICFP '11 conference proceedings.

Chargueraud:2011:CFV

[636] Arthur Charguéraud. Characteristic formulae for the verification of imperative programs. *ACM SIGPLAN Notices*, 46(9):418–430, September 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). ICFP '11 conference proceedings.

Ahmed:2011:EPC

[637] Amal Ahmed and Matthias Blume. An equivalence-preserving CPS translation via multi-language semantics. *ACM SIGPLAN Notices*, 46(9):431–444, September 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). ICFP '11 conference proceedings.

Thamsborg:2011:KLR

[638] Jacob Thamsborg and Lars Birkedal. A Kripke logical relation for effect-based program transformations. *ACM SIGPLAN Notices*, 46(9):445–456, September 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). ICFP '11 conference proceedings.

Sutherland:2011:SP

[639] Ivan Sutherland. The sequential prison. *ACM SIGPLAN Notices*, 46 (10):1–2, October 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). OOPSLA '11 conference proceedings.

Liu:2011:SPD

[640] Tongping Liu and Emery D. Berger. SHERIFF: precise detection and automatic mitigation of false sharing. *ACM SIGPLAN Notices*, 46(10):3–18, October 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). OOPSLA '11 conference proceedings.

Weeratunge:2011:APA

[641] Dasarath Weeratunge, Xiangyu Zhang, and Suresh Jaganathan. Accentuating the positive: atomicity inference and enforcement using correct executions. *ACM SIGPLAN Notices*, 46(10): 19–34, October 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). OOPSLA '11 conference proceedings.

Li:2011:SST

[642] Du Li, Witawas Srisa-an, and Matthew B. Dwyer. SOS: saving time in dynamic race detection with stationary analysis. *ACM SIGPLAN Notices*, 46(10):35–50, October 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). OOPSLA '11 conference proceedings.

Shacham:2011:TAC

[643] Ohad Shacham, Nathan Bronson, Alex Aiken, Mooly Sagiv, Martin Vechev, and Eran Yahav. Testing atomicity of composed concurrent operations. *ACM SIGPLAN Notices*, 46(10):51–64, October 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). OOPSLA '11 conference proceedings.

Yessenov:2011:DDS

[644] Kuat Yessenov, Zhilei Xu, and Armando Solar-Lezama. Data-driven synthesis for object-oriented frameworks. *ACM SIGPLAN Notices*, 46(10):65–82, October 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). OOPSLA '11 conference proceedings.

Pu:2011:SFO

[645] Yewen Pu, Rastislav Bodik, and Saurabh Srivastava. Synthesis of first-order dynamic programming algorithms. *ACM SIGPLAN Notices*, 46 (10):83–98, October 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). OOPSLA '11 conference proceedings.

Doherty:2011:KAM

[646] Jesse Doherty, Laurie Hendren, and Soroush Radpour. Kind analysis for MATLAB. *ACM SIGPLAN Notices*, 46(10):99–118, October 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). OOPSLA '11 conference proceedings.

Feldthaus:2011:TSR

[647] Asger Feldthaus, Todd Millstein, Anders Møller, Max Schäfer, and Frank Tip. Tool-supported refactoring for JavaScript. *ACM SIGPLAN Notices*, 46(10):119–138, October 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). OOPSLA '11 conference proceedings.

Kats:2011:ILD

[648] Lennart C. L. Kats, Rob Vermaas, and Eelco Visser. Integrated language definition testing: enabling test-driven language development. *ACM SIGPLAN Notices*, 46(10):139–154, October 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). OOPSLA '11 conference proceedings.

Jovic:2011:CMI

[649] Milan Jovic, Andrea Adamoli, and Matthias Hauswirth. Catch me if you can: performance bug detection in the wild. *ACM SIGPLAN Notices*, 46(10): 155–170, October 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). OOPSLA '11 conference proceedings.

Joshi:2011:PPT

[650] Pallavi Joshi, Haryadi S. Gunawi, and Koushik Sen. PREFAIL: a programmable tool for multiple-failure injection. *ACM SIGPLAN Notices*, 46 (10):171–188, October 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). OOPSLA '11 conference proceedings.

Thummalapenta:2011:SMS

[651] Suresh Thummalapenta, Tao Xie, Nikolai Tillmann, Jonathan de Halleux, and Zhendong Su. Synthesizing method sequences for high-coverage testing. *ACM SIGPLAN Notices*, 46 (10):189–206, October 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). OOPSLA '11 conference proceedings.

Tripp:2011:HED

[652] Omer Tripp, Greta Yorsh, John Field, and Mooly Sagiv. HAWKEYE: effective discovery of dataflow impediments to parallelization. *ACM SIGPLAN Notices*, 46(10):207–224, October 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). OOPSLA '11 conference proceedings.

Golan-Gueta:2011:AFG

[653] Guy Golan-Gueta, Nathan Bronson, Alex Aiken, G. Ramalingam, Mooly Sagiv, and Eran Yahav. Automatic fine-grain locking using shape properties. *ACM SIGPLAN Notices*, 46(10): 225–242, October 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). OOPSLA '11 conference proceedings.

Ke:2011:SPP

[654] Chuanle Ke, Lei Liu, Chao Zhang, Tongxin Bai, Bryan Jacobs, and Chen Ding. Safe parallel programming using dynamic dependence hints. *ACM SIGPLAN Notices*, 46(10):243–258, October 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). OOPSLA '11 conference proceedings.

Raman:2011:SSP

[655] Arun Raman, Greta Yorsh, Martin Vechev, and Eran Yahav. Sprint: speculative prefetching of remote data. *ACM SIGPLAN Notices*, 46(10):259–274, October 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). OOPSLA '11 conference proceedings.

Aftandilian:2011:AA

[656] Edward E. Aftandilian, Samuel Z. Guyer, Martin Vechev, and Eran Yahav. Asynchronous assertions. *ACM SIGPLAN Notices*, 46(10):275–288, October 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). OOPSLA '11 conference proceedings.

Hoffman:2011:RPS

[657] Kevin J. Hoffman, Harrison Metzger, and Patrick Eugster. Ribbons: a partially shared memory programming model. *ACM SIGPLAN Notices*, 46 (10):289–306, October 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). OOPSLA '11 conference proceedings.

Yang:2011:WNM

[658] Xi Yang, Stephen M. Blackburn, Daniel Frampton, Jennifer B. Sartor, and Kathryn S. McKinley. Why nothing matters: the impact of zeroing. *ACM SIGPLAN Notices*, 46(10):307–324, October 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-

2867 (print), 1558-1160 (electronic). OOPSLA '11 conference proceedings.

Darulova:2011:TNC

[659] Eva Darulova and Viktor Kuncak. Trustworthy numerical computation in Scala. *ACM SIGPLAN Notices*, 46(10): 325–344, October 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). OOPSLA '11 conference proceedings.

Li:2011:JEC

[660] Siliang Li and Gang Tan. JET: exception checking in the Java Native Interface. *ACM SIGPLAN Notices*, 46(10): 345–358, October 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). OOPSLA '11 conference proceedings.

David:2011:ISM

[661] Cristina David and Wei-Ngan Chin. Immutable specifications for more concise and precise verification. *ACM SIGPLAN Notices*, 46(10):359–374, October 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). OOPSLA '11 conference proceedings.

Shali:2011:HPE

[662] Amin Shali and William R. Cook. Hybrid partial evaluation. *ACM SIGPLAN Notices*, 46(10):375–390, October 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). OOPSLA '11 conference proceedings.

Erdweg:2011:SLB

[663] Sebastian Erdweg, Tillmann Rendel, Christian Kästner, and Klaus Ostermann. SugarJ: library-based syntactic language extensibility. *ACM SIGPLAN Notices*, 46(10):391–406, October 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). OOPSLA '11 conference proceedings.

Demetrescu:2011:RIP

[664] Camil Demetrescu, Irene Finocchi, and Andrea Ribichini. Reactive imperative programming with dataflow constraints. *ACM SIGPLAN Notices*, 46 (10):407–426, October 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). OOPSLA '11 conference proceedings.

Burckhardt:2011:TPO

[665] Sebastian Burckhardt, Daan Leijen, Caitlin Sadowski, Jaeheon Yi, and Thomas Ball. Two for the price of one: a model for parallel and incremental computation. *ACM SIGPLAN Notices*, 46(10):427–444, October 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). OOPSLA '11 conference proceedings.

Tian:2011:STT

[666] Kai Tian, Eddy Zhang, and Xipeng Shen. A step towards transparent integration of input-consciousness into dynamic program optimizations. *ACM SIGPLAN Notices*, 46(10):445–462, October 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). OOPSLA '11 conference proceedings.

Jo:2011:ELR

[667] Youngjoon Jo and Milind Kulkarni. Enhancing locality for recursive traversals of recursive structures. *ACM SIGPLAN Notices*, 46(10):463–482, October 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). OOPSLA '11 conference proceedings.

Adams:2011:FST

[668] Michael D. Adams, Andrew W. Keep, Jan Midtgaard, Matthew Might, Arun Chauhan, and R. Kent Dybvig. Flow-sensitive type recovery in linear-log time. *ACM SIGPLAN Notices*, 46(10): 483–498, October 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). OOPSLA '11 conference proceedings.

Acar:2011:OSC

[669] Umut A. Acar, Arthur Charguéraud, and Mike Rainey. Oracle scheduling: controlling granularity in implicitly parallel languages. *ACM SIGPLAN Notices*, 46(10):499–518, October 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). OOPSLA '11 conference proceedings.

Jeon:2011:KPS

[670] Donghwan Jeon, Saturnino Garcia, Chris Louie, and Michael Bedford Taylor. Kismet: parallel speedup estimates for serial programs. *ACM SIGPLAN Notices*, 46(10):519–536, October 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). OOPSLA '11 conference proceedings.

Cledat:2011:ESS

[671] Romain E. Cledat, Tushar Kumar, and Santosh Pande. Efficiently speeding up sequential computation through the n-way programming model. *ACM SIGPLAN Notices*, 46(10):537–554, October 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). OOPSLA '11 conference proceedings.

Pyla:2011:ECG

[672] Hari K. Pyla, Calvin Ribbens, and Srinidhi Varadarajan. Exploiting coarse-grain speculative parallelism. *ACM SIGPLAN Notices*, 46(10):555–574, October 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). OOPSLA '11 conference proceedings.

Turon:2011:SJP

[673] Aaron J. Turon and Claudio V. Russo. Scalable join patterns. *ACM SIGPLAN Notices*, 46(10):575–594, October 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). OOPSLA '11 conference proceedings.

Delaware:2011:PLT

[674] Benjamin Delaware, William Cook, and Don Batory. Product lines of theorems. *ACM SIGPLAN Notices*, 46(10): 595–608, October 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). OOPSLA '11 conference proceedings.

Ina:2011:GTG

[675] Lintaro Ina and Atsushi Igarashi. Gradual typing for generics. *ACM SIG-*

PLAN Notices, 46(10):609–624, October 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). OOPSLA '11 conference proceedings.

Tov:2011:TST

[676] Jesse A. Tov and Riccardo Pucella. A theory of substructural types and control. *ACM SIGPLAN Notices*, 46(10): 625–642, October 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). OOPSLA '11 conference proceedings.

Buse:2011:BBU

[677] Raymond P. L. Buse, Caitlin Sadowski, and Westley Weimer. Benefits and barriers of user evaluation in software engineering research. *ACM SIGPLAN Notices*, 46(10):643–656, October 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). OOPSLA '11 conference proceedings.

Sewe:2011:CCS

[678] Andreas Sewe, Mira Mezini, Aibek Sarimbekov, and Walter Binder. Da capo con Scala: design and analysis of a Scala benchmark suite for the Java Virtual Machine. *ACM SIGPLAN Notices*, 46(10):657–676, October 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). OOPSLA '11 conference proceedings.

Richards:2011:ACJ

[679] Gregor Richards, Andreas Gal, Brendan Eich, and Jan Vitek. Automated construction of JavaScript benchmarks. *ACM SIGPLAN Notices*, 46(10):677–694, October 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). OOPSLA '11 conference proceedings.

Hemel:2011:DPM

[680] Zef Hemel and Eelco Visser. Declaratively programming the Mobile Web with Mobl. *ACM SIGPLAN Notices*, 46(10):695–712, October 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). OOPSLA '11 conference proceedings.

Sunshine:2011:FCS

[681] Joshua Sunshine, Karl Naden, Sven Stork, Jonathan Aldrich, and Éric Tanter. First-class state change in Plaid. *ACM SIGPLAN Notices*, 46(10):713–732, October 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). OOPSLA '11 conference proceedings.

Lorenz:2011:CLL

[682] David H. Lorenz and Boaz Rosenan. Cedalion: a language for language oriented programming. *ACM SIGPLAN Notices*, 46(10):733–752, October 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). OOPSLA '11 conference proceedings.

Hammer:2011:SAS

[683] Matthew A. Hammer, Georg Neis, Yan Chen, and Umut A. Acar. Self-adjusting stack machines. *ACM SIGPLAN Notices*, 46(10):753–772, October 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print),

1558-1160 (electronic). OOPSLA '11 conference proceedings.

Kulkarni:2011:JCP

[684] Prasad A. Kulkarni. JIT compilation policy for modern machines. *ACM SIGPLAN Notices*, 46(10):773–788, October 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). OOPSLA '11 conference proceedings.

Wu:2011:RTS

[685] Peng Wu, Hiroshige Hayashizaki, Hiroshi Inoue, and Toshio Nakatani. Reducing trace selection footprint for large-scale Java applications without performance loss. *ACM SIGPLAN Notices*, 46(10):789–804, October 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). OOPSLA '11 conference proceedings.

Kastner:2011:VAP

[686] Christian Kästner, Paolo G. Giarrusso, Tillmann Rendel, Sebastian Erdweg, Klaus Ostermann, and Thorsten Berger. Variability-aware parsing in the presence of lexical macros and conditional compilation. *ACM SIGPLAN Notices*, 46(10):805–824, October 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). OOPSLA '11 conference proceedings.

Wurthinger:2011:SAR

[687] Thomas Würthinger, Danilo Ansaloni, Walter Binder, Christian Wimmer, and Hanspeter Mössenböck. Safe and atomic run-time code evolution for Java and its application to dynamic AOP. *ACM SIGPLAN Notices*, 46(10): 825–844, October 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). OOPSLA '11 conference proceedings.

Pinto:2011:SAC

[688] Pedro da Rocha Pinto, Thomas Dinsdale-Young, Mike Dodds, Philippa Gardner, and Mark Wheelhouse. A simple abstraction for complex concurrent indexes. *ACM SIGPLAN Notices*, 46(10):845–864, October 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). OOPSLA '11 conference proceedings.

Anderson:2011:CNP

[689] Zachary Anderson and David Gay. Composable, nestable, pessimistic atomic statements. *ACM SIGPLAN Notices*, 46(10):865–884, October 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). OOPSLA '11 conference proceedings.

Lublinerman:2011:DI

[690] Roberto Lublinerman, Jisheng Zhao, Zoran Budimlić, Swarat Chaudhuri, and Vivek Sarkar. Delegated isolation. *ACM SIGPLAN Notices*, 46(10): 885–902, October 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). OOPSLA '11 conference proceedings.

Harris:2011:ACA

[691] Tim Harris, Martin Abadi, Rebecca Isaacs, and Ross McIlroy. AC: composable asynchronous IO for native languages. *ACM SIGPLAN Notices*, 46

(10):903–920, October 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). OOPSLA '11 conference proceedings.

Austin:2011:VVL

[692] Thomas H. Austin, Tim Disney, and Cormac Flanagan. Virtual values for language extension. *ACM SIGPLAN Notices*, 46(10):921–938, October 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). OOPSLA '11 conference proceedings.

Palmer:2011:BJM

[693] Zachary Palmer and Scott F. Smith. Backstage Java: making a difference in metaprogramming. *ACM SIGPLAN Notices*, 46(10):939–958, October 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). OOPSLA '11 conference proceedings.

Verwaest:2011:FOL

[694] Toon Verwaest, Camillo Bruni, Mircea Lungu, and Oscar Nierstrasz. Flexible object layouts: enabling lightweight language extensions by intercepting slot access. *ACM SIGPLAN Notices*, 46(10):959–972, October 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). OOPSLA '11 conference proceedings.

Allen:2011:TCM

[695] Eric Allen, Justin Hilburn, Scott Kilpatrick, Victor Luchangco, Sukyoung Ryu, David Chase, and Guy Steele. Type checking modular multiple dispatch with parametric polymorphism and multiple inheritance. *ACM SIGPLAN Notices*, 46(10):973–992, October 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). OOPSLA '11 conference proceedings.

Im:2011:STS

[696] Hyeonseung Im, Keiko Nakata, Jacques Garrigue, and Sungwoo Park. A syntactic type system for recursive modules. *ACM SIGPLAN Notices*, 46(10): 993–1012, October 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). OOPSLA '11 conference proceedings.

Summers:2011:FBC

[697] Alexander J. Summers and Peter Mueller. Freedom before commitment: a lightweight type system for object initialisation. *ACM SIGPLAN Notices*, 46(10):1013–1032, October 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). OOPSLA '11 conference proceedings.

Madhavan:2011:NDV

[698] Ravichandhran Madhavan and Raghavan Komondoor. Null dereference verification via over-approximated weakest pre-conditions analysis. *ACM SIGPLAN Notices*, 46(10):1033–1052, October 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). OOPSLA '11 conference proceedings.

Sridharan:2011:FTA

[699] Manu Sridharan, Shay Artzi, Marco

Pistoia, Salvatore Guarnieri, Omer Tripp, and Ryan Berg. F4F: taint analysis of framework-based Web applications. *ACM SIGPLAN Notices*, 46(10): 1053–1068, October 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). OOPSLA '11 conference proceedings.

Son:2011:RFM

[700] Sooel Son, Kathryn S. McKinley, and Vitaly Shmatikov. RoleCast: finding missing security checks when you do not know what checks are. *ACM SIGPLAN Notices*, 46(10):1069–1084, October 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). OOPSLA '11 conference proceedings.

Veldema:2011:IDP

[701] Ronald Veldema and Michæl Philippsen. Iterative data-parallel mark&sweep on a GPU. *ACM SIGPLAN Notices*, 46 (11):1–10, November 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). ISMM '11 conference proceedings.

Majo:2011:MMN

[702] Zoltan Majo and Thomas R. Gross. Memory management in NUMA multicore systems: trapped between cache contention and interconnect overhead. *ACM SIGPLAN Notices*, 46(11):11–20, November 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). ISMM '11 conference proceedings.

Marlow:2011:MGC

[703] Simon Marlow and Simon Peyton Jones. Multicore garbage collection with local heaps. *ACM SIGPLAN Notices*, 46(11):21–32, November 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). ISMM '11 conference proceedings.

Garner:2011:CEO

[704] Robin J. Garner, Stephen M. Blackburn, and Daniel Frampton. A comprehensive evaluation of object scanning techniques. *ACM SIGPLAN Notices*, 46(11):33–42, November 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). ISMM '11 conference proceedings.

Gu:2011:TPL

[705] Xiaoming Gu and Chen Ding. On the theory and potential of LRU–MRU collaborative cache management. *ACM SIGPLAN Notices*, 46(11):43–54, November 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). ISMM '11 conference proceedings.

Afek:2011:CIA

[706] Yehuda Afek, Dave Dice, and Adam Morrison. Cache index-aware memory allocation. *ACM SIGPLAN Notices*, 46(11):55–64, November 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). ISMM '11 conference proceedings.

Hertz:2011:WWR

[707] Matthew Hertz, Stephen Kane, Elizabeth Keudel, Tongxin Bai, Chen Ding, Xiaoming Gu, and Jonathan E. Bard. Waste not, want not: resource-based garbage collection in a shared environment. *ACM SIGPLAN Notices*, 46(11): 65–76, November 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). ISMM '11 conference proceedings.

Mutlu:2011:MSM

[708] Onur Mutlu. Memory systems in the many-core era: challenges, opportunities, and solution directions. *ACM SIGPLAN Notices*, 46(11):77–78, November 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). ISMM '11 conference proceedings.

Tene:2011:CCC

[709] Gil Tene, Balaji Iyengar, and Michael Wolf. C4: the continuously concurrent compacting collector. *ACM SIGPLAN Notices*, 46(11):79–88, November 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). ISMM '11 conference proceedings.

Kalibera:2011:HRO

[710] Tomas Kalibera and Richard Jones. Handles revisited: optimising performance and memory costs in a real-time collector. *ACM SIGPLAN Notices*, 46(11):89–98, November 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). ISMM '11 conference proceedings.

Aigner:2011:STM

[711] Martin Aigner, Andreas Haas, Christoph M. Kirsch, Michael Lippautz, Ana Sokolova, Stephanie Stroka, and Andreas Unterweger. Short-term memory for self-collecting mutators. *ACM SIGPLAN Notices*, 46(11):99–108, November 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). ISMM '11 conference proceedings.

Singer:2011:GCA

[712] Jeremy Singer, George Kovoor, Gavin Brown, and Mikel Luján. Garbage collection auto-tuning for Java MapReduce on multi-cores. *ACM SIGPLAN Notices*, 46(11):109–118, November 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). ISMM '11 conference proceedings.

Wagner:2011:CMM

[713] Gregor Wagner, Andreas Gal, Christian Wimmer, Brendan Eich, and Michael Franz. Compartmental memory management in a modern Web browser. *ACM SIGPLAN Notices*, 46 (11):119–128, November 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). ISMM '11 conference proceedings.

Tarau:2011:IST

[714] Paul Tarau. Integrated symbol table, engine and heap memory management in multi-engine Prolog. *ACM SIGPLAN Notices*, 46(11):129–138, November 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867

(print), 1558-1160 (electronic). ISMM '11 conference proceedings.

Petricek:2011:EMP

[715] Tomas Petricek, Alan Mycroft, and Don Syme. Extending monads with pattern matching. *ACM SIGPLAN Notices*, 46(12):1–12, December 2011.

Giorgidze:2011:BBM

[716] George Giorgidze, Torsten Grust, Nils Schweinsberg, and Jeroen Weijers. Bringing back monad comprehensions. *ACM SIGPLAN Notices*, 46(12):13–22, December 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Bolingbroke:2011:TCF

[717] Maximilian Bolingbroke, Simon Peyton Jones, and Dimitrios Vytiniotis. Termination combinators forever. *ACM SIGPLAN Notices*, 46(12):23–34, December 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Westbrook:2011:HHL

[718] Edwin Westbrook, Nicolas Frisby, and Paul Brauner. Hobbits for Haskell: a library for higher-order encodings in functional programming languages. *ACM SIGPLAN Notices*, 46(12):35–46, December 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Harper:2011:LWG

[719] Thomas Harper. A library writer's guide to shortcut fusion. *ACM SIGPLAN Notices*, 46(12):47–58, December 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Lippmeier:2011:EPS

[720] Ben Lippmeier and Gabriele Keller. Efficient parallel stencil convolution in Haskell. *ACM SIGPLAN Notices*, 46(12):59–70, December 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Marlow:2011:MDP

[721] Simon Marlow, Ryan Newton, and Simon Peyton Jones. A monad for deterministic parallelism. *ACM SIGPLAN Notices*, 46(12):71–82, December 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Leijen:2011:PCP

[722] Daan Leijen, Manuel Fahndrich, and Sebastian Burckhardt. Prettier concurrency: purely functional concurrent revisions. *ACM SIGPLAN Notices*, 46(12):83–94, December 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Stefan:2011:FDI

[723] Deian Stefan, Alejandro Russo, John C. Mitchell, and David Mazières. Flexible dynamic information flow control in Haskell. *ACM SIGPLAN Notices*, 46(12):95–106, December 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Duregaard:2011:EPG

[724] Jonas Duregård and Patrik Jansson. Embedded parser generators. *ACM SIGPLAN Notices*, 46(12):107–117, December 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Epstein:2011:THC

[725] Jeff Epstein, Andrew P. Black, and Simon Peyton-Jones. Towards Haskell in the cloud. *ACM SIGPLAN Notices*, 46(12):118–129, December 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Black:2012:PSD

[726] Andrew P. Black and Peter W. O'Hearn. Presentation of the SIGPLAN distinguished achievement award to Sir Charles Antony Richard Hoare, FRS, FREng, FBCS; and interview. *ACM SIGPLAN Notices*, 47 (1):1–2, January 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Hoare:2012:MTR

[727] Tony Hoare. Message of thanks: on the receipt of the 2011 ACM SIGPLAN distinguished achievement award. *ACM SIGPLAN Notices*, 47(1):3–6, January 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

vanStaden:2012:F

[728] Stephan van Staden, Cristiano Calcagno, and Bertrand Meyer. Freefinement. *ACM SIGPLAN Notices*, 47(1):7–18, January 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Joshi:2012:UHI

[729] Saurabh Joshi, Shuvendu K. Lahiri, and Akash Lal. Underspecified harnesses and interleaved bugs. *ACM SIGPLAN Notices*, 47(1):19–30, January 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Gardner:2012:TPL

[730] Philippa Anne Gardner, Sergio Maffeis, and Gareth David Smith. Towards a program logic for JavaScript. *ACM SIGPLAN Notices*, 47(1):31–44, January 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Krishnaswami:2012:HOF

[731] Neelakantan R. Krishnaswami, Nick Benton, and Jan Hoffmann. Higher-order functional reactive programming in bounded space. *ACM SIGPLAN Notices*, 47(1):45–58, January 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Hur:2012:MBK

[732] Chung-Kil Hur, Derek Dreyer, Georg Neis, and Viktor Vafeiadis. The marriage of bisimulations and Kripke logical relations. *ACM SIGPLAN Notices*, 47(1):59–72, January 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

James:2012:IE

[733] Roshan P. James and Amr Sabry. Information effects. *ACM SIGPLAN Notices*, 47(1):73–84, January 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Yang:2012:LAE

[734] Jean Yang, Kuat Yessenov, and Armando Solar-Lezama. A language for automatically enforcing privacy policies. *ACM SIGPLAN Notices*, 47(1): 85–96, January 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Barthe:2012:PRR

[735] Gilles Barthe, Boris Köpf, Federico Olmedo, and Santiago Zanella Béguelin. Probabilistic relational reasoning for differential privacy. *ACM SIGPLAN Notices*, 47(1):97–110, January 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Heidegger:2012:APC

[736] Phillip Heidegger, Annette Bieniusa, and Peter Thiemann. Access permission contracts for scripting languages. *ACM SIGPLAN Notices*, 47(1):111–122, January 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Madhusudan:2012:RPI

[737] Parthasarathy Madhusudan, Xiaokang Qiu, and Andrei Stefanescu. Recursive proofs for inductive tree data-structures. *ACM SIGPLAN Notices*, 47(1):123–136, January 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Veanes:2012:SFS

[738] Margus Veanes, Pieter Hooimeijer, Benjamin Livshits, David Molnar, and Nikolaj Bjorner. Symbolic finite state transducers: algorithms and applications. *ACM SIGPLAN Notices*, 47(1): 137–150, January 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Koksal:2012:CC

[739] Ali Sinan Köksal, Viktor Kuncak, and Philippe Suter. Constraints as control. *ACM SIGPLAN Notices*, 47(1): 151–164, January 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Austin:2012:MFD

[740] Thomas H. Austin and Cormac Flanagan. Multiple facets for dynamic information flow. *ACM SIGPLAN Notices*, 47(1):165–178, January 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Ray:2012:DCI

[741] Donald Ray and Jay Ligatti. Defining code-injection attacks. *ACM SIGPLAN Notices*, 47(1):179–190, January 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Basu:2012:DCR

[742] Samik Basu, Tevfik Bultan, and Meriem Ouederni. Deciding choreography realizability. *ACM SIGPLAN*

Notices, 47(1):191–202, January 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Bouajjani:2012:ARP

[743] Ahmed Bouajjani and Michael Emmi. Analysis of recursively parallel programs. *ACM SIGPLAN Notices*, 47(1): 203–214, January 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Rexford:2012:PLP

[744] Jennifer Rexford. Programming languages for programmable networks. *ACM SIGPLAN Notices*, 47(1):215–216, January 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Monsanto:2012:CRT

[745] Christopher Monsanto, Nate Foster, Rob Harrison, and David Walker. A compiler and run-time system for network programming languages. *ACM SIGPLAN Notices*, 47(1):217–230, January 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Chugh:2012:NRL

[746] Ravi Chugh, Patrick M. Rondon, and Ranjit Jhala. Nested refinements: a logic for duck typing. *ACM SIGPLAN Notices*, 47(1):231–244, January 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Cousot:2012:AIFa

[747] Patrick Cousot and Radhia Cousot. An abstract interpretation framework for termination. *ACM SIGPLAN Notices*, 47(1):245–258, January 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Hoder:2012:PGA

[748] Krystof Hoder, Laura Kovacs, and Andrei Voronkov. Playing in the grey area of proofs. *ACM SIGPLAN Notices*, 47(1):259–272, January 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Stampoulis:2012:SUE

[749] Antonis Stampoulis and Zhong Shao. Static and user-extensible proof checking. *ACM SIGPLAN Notices*, 47(1): 273–284, January 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Klein:2012:RYR

[750] Casey Klein, John Clements, Christos Dimoulas, Carl Eastlund, Matthias Felleisen, Matthew Flatt, Jay A. McCarthy, Jon Rafkind, Sam Tobin-Hochstadt, and Robert Bruce Findler. Run your research: on the effectiveness of lightweight mechanization. *ACM SIGPLAN Notices*, 47(1):285–296, January 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Farzan:2012:VPC

[751] Azadeh Farzan and Zachary Kincaid. Verification of parameterized concurrent programs by modular reasoning about data and control. *ACM SIGPLAN Notices*, 47(1):297–308, January

2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Botincan:2012:RSS

[752] Matko Botincan, Mike Dodds, and Suresh Jagannathan. Resource-sensitive synchronization inference by abduction. *ACM SIGPLAN Notices*, 47(1):309–322, January 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Reddy:2012:SCI

[753] Uday S. Reddy and John C. Reynolds. Syntactic control of interference for separation logic. *ACM SIGPLAN Notices*, 47(1):323–336, January 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Licata:2012:CDT

[754] Daniel R. Licata and Robert Harper. Canonicity for 2-dimensional type theory. *ACM SIGPLAN Notices*, 47(1): 337–348, January 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Kammar:2012:AFE

[755] Ohad Kammar and Gordon D. Plotkin. Algebraic foundations for effect-dependent optimisations. *ACM SIGPLAN Notices*, 47(1):349–360, January 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Cretin:2012:PCA

[756] Julien Cretin and Didier Rémy. On the power of coercion abstraction. *ACM SIGPLAN Notices*, 47(1):361–372, January 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Naik:2012:AT

[757] Mayur Naik, Hongseok Yang, Ghila Castelnuovo, and Mooly Sagiv. Abstractions from tests. *ACM SIGPLAN Notices*, 47(1):373–386, January 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Smaragdakis:2012:SPR

[758] Yannis Smaragdakis, Jacob Evans, Caitlin Sadowski, Jaeheon Yi, and Cormac Flanagan. Sound predictive race detection in polynomial time. *ACM SIGPLAN Notices*, 47(1):387–400, January 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Bojanczyk:2012:TNC

[759] Mikolaj Bojanczyk, Laurent Braud, Bartek Klin, and Slawomir Lasota. Towards nominal computation. *ACM SIGPLAN Notices*, 47(1):401–412, January 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Cave:2012:PBI

[760] Andrew Cave and Brigitte Pientka. Programming with binders and indexed data-types. *ACM SIGPLAN Notices*, 47(1):413–424, January 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Moore:2012:MLF

[761] J. Strother Moore. Meta-level features in an industrial-strength theorem prover. *ACM SIGPLAN Notices*, 47(1): 425–426, January 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Zhao:2012:FLI

[762] Jianzhou Zhao, Santosh Nagarakatte, Milo M. K. Martin, and Steve Zdancewic. Formalizing the LLVM intermediate representation for verified program transformations. *ACM SIGPLAN Notices*, 47(1):427–440, January 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Zhu:2012:RAA

[763] Zeyuan Allen Zhu, Sasa Misailovic, Jonathan A. Kelner, and Martin Rinard. Randomized accuracy-aware program transformations for efficient approximate computations. *ACM SIGPLAN Notices*, 47(1):441–454, January 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Liang:2012:RGB

[764] Hongjin Liang, Xinyu Feng, and Ming Fu. A rely-guarantee-based simulation for verifying concurrent program transformations. *ACM SIGPLAN Notices*, 47(1):455–468, January 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Balabonski:2012:UAF

[765] Thibaut Balabonski. A unified approach to fully lazy sharing. *ACM SIGPLAN Notices*, 47(1):469–480, January 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Rastogi:2012:IOG

[766] Aseem Rastogi, Avik Chaudhuri, and Basil Hosmer. The ins and outs of gradual type inference. *ACM SIGPLAN Notices*, 47(1):481–494, January 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Hofmann:2012:EL

[767] Martin Hofmann, Benjamin Pierce, and Daniel Wagner. Edit lenses. *ACM SIGPLAN Notices*, 47(1):495–508, January 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Batty:2012:CCC

[768] Mark Batty, Kayvan Memarian, Scott Owens, Susmit Sarkar, and Peter Sewell. Clarifying and compiling C/C++ concurrency: from C++11 to POWER. *ACM SIGPLAN Notices*, 47 (1):509–520, January 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Ramananandro:2012:MSC

[769] Tahina Ramananandro, Gabriel Dos Reis, and Xavier Leroy. A mechanized semantics for C++ object construction and destruction, with applications to resource management. *ACM SIGPLAN Notices*, 47(1):521–532, January 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Ellison:2012:EFS

[770] Chucky Ellison and Grigore Rosu. An executable formal semantics of C with applications. *ACM SIGPLAN Notices*, 47(1):533–544, January 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Bhat:2012:TTP

[771] Sooraj Bhat, Ashish Agarwal, Richard Vuduc, and Alexander Gray. A type theory for probability density functions. *ACM SIGPLAN Notices*, 47(1): 545–556, January 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Naden:2012:TSB

[772] Karl Naden, Robert Bocchino, Jonathan Aldrich, and Kevin Bierhoff. A type system for borrowing permissions. *ACM SIGPLAN Notices*, 47(1):557–570, January 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Strub:2012:SCB

[773] Pierre-Yves Strub, Nikhil Swamy, Cedric Fournet, and Juan Chen. Self-certification: bootstrapping certified typecheckers in F* with Coq. *ACM SIGPLAN Notices*, 47(1):571–584, January 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

DHondt:2012:ISS

[774] Theo D'Hondt. An interpreter for server-side HOP. *ACM SIGPLAN Notices*, 47(2):1–12, February 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Chang:2012:IOT

[775] Mason Chang, Bernd Mathiske, Edwin Smith, Avik Chaudhuri, Andreas Gal, Michael Bebenita, Christian Wimmer, and Michael Franz. The impact of optional type information on JIT compilation of dynamically typed languages. *ACM SIGPLAN Notices*, 47(2):13–24, February 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Homescu:2012:HTJ

[776] Andrei Homescu and Alex Suhan. HappyJIT: a tracing JIT compiler for PHP. *ACM SIGPLAN Notices*, 47(2): 25–36, February 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Zhao:2012:PTI

[777] Tian Zhao. Polymorphic type inference for scripting languages with object extensions. *ACM SIGPLAN Notices*, 47(2):37–50, February 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Hirschfeld:2012:EUC

[778] Robert Hirschfeld, Michael Perscheid, and Michael Haupt. Explicit use-case representation in object-oriented programming languages. *ACM SIGPLAN Notices*, 47(2):51–60, February 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Chevalier-Boisvert:2012:BSH

[779] Maxime Chevalier-Boisvert, Erick Lavoie, Marc Feeley, and Bruno Dufour. Bootstrapping a self-hosted research virtual machine for JavaScript: an experience report. *ACM SIGPLAN Notices*, 47(2):61–72, February 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Klock:2012:BLR

[780] Felix S. Klock II and William D. Clinger. Bounded-latency regional garbage collection. *ACM SIGPLAN Notices*, 47(2):73–84, February 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Tew:2012:PAM

[781] Kevin Tew, James Swaine, Matthew Flatt, Robert Bruce Findler, and Peter Dinda. Places: adding message-passing parallelism to Racket. *ACM SIGPLAN Notices*, 47(2):85–96, February 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Stuchlik:2012:SVD

[782] Andreas Stuchlik and Stefan Hanenberg. Static vs. dynamic type systems: an empirical study about the relationship between type casts and development time. *ACM SIGPLAN Notices*, 47(2):97–106, February 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Schultz:2012:MCP

[783] Ulrik P. Schultz. Multilingual component programming in Racket. *ACM SIGPLAN Notices*, 47(3):1–2, March 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Rosenmuller:2012:TDS

[784] Marko Rosenmüller, Norbert Siegmund, Mario Pukall, and Sven Apel. Tailoring dynamic software product lines. *ACM SIGPLAN Notices*, 47 (3):3–12, March 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Batory:2012:FIP

[785] Don Batory, Peter Höfner, and Jongwook Kim. Feature interactions, products, and composition. *ACM SIGPLAN Notices*, 47(3):13–22, March 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Ribeiro:2012:IFD

[786] Márcio Ribeiro, Felipe Queiroz, Paulo Borba, Társis Tolêdo, Claus Brabrand, and Sérgio Soares. On the impact of feature dependencies when maintaining preprocessor-based software product lines. *ACM SIGPLAN Notices*, 47 (3):23–32, March 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Neves:2012:ISE

[787] Laís Neves, Leopoldo Teixeira, Demóstenes Sena, Vander Alves, Uirá Kulezsa, and Paulo Borba. Investigating the safe evolution of software product lines.

ACM SIGPLAN Notices, 47(3):33–42, March 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Hannousse:2012:SAA

[788] Abdelhakim Hannousse, Rémi Douence, and Gilles Ardourel. Static analysis of aspect interaction and composition in component models. *ACM SIGPLAN Notices*, 47(3):43–52, March 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Otte:2012:ICB

[789] William R. Otte, Aniruddha Gokhale, Douglas C. Schmidt, and Johnny Willemsen. Infrastructure for component-based DDS application development. *ACM SIGPLAN Notices*, 47(3):53–62, March 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Li:2012:GGP

[790] Yulin Li and Gordon S. Novak, Jr. Generation of geometric programs specified by diagrams. *ACM SIGPLAN Notices*, 47(3):63–72, March 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Steck:2012:MDE

[791] Andreas Steck, Alex Lotz, and Christian Schlegel. Model-driven engineering and run-time model-usage in service robotics. *ACM SIGPLAN Notices*, 47(3):73–82, March 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Vermolen:2012:GDM

[792] Sander Daniël Vermolen, Guido Wachsmuth, and Eelco Visser. Generating database migrations for evolving Web applications. *ACM SIGPLAN Notices*, 47(3):83–92, March 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Danvy:2012:PFS

[793] Olivier Danvy. Pragmatics for formal semantics. *ACM SIGPLAN Notices*, 47(3):93–94, March 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Shubert:2012:AMB

[794] Gary J. Shubert. Application of model based development to flexible code generation. *ACM SIGPLAN Notices*, 47(3):95–96, March 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Asai:2012:RDS

[795] Kenichi Asai. Reflection in direct style. *ACM SIGPLAN Notices*, 47(3):97–106, March 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Nystrom:2012:FRT

[796] Nathaniel Nystrom, Derek White, and Kishen Das. Firepile: run-time compilation for GPUs in Scala. *ACM SIGPLAN Notices*, 47(3):107–116, March 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Esmaeilsabzali:2012:MAC

[797] Shahram Esmaeilsabzali, Bernd Fischer, and Joanne M. Atlee. Monitoring aspects for the customization of automatically generated code for big-step models. *ACM SIGPLAN Notices*, 47(3):117–126, March 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Lindeman:2012:DDD

[798] Ricky T. Lindeman, Lennart C. L. Kats, and Eelco Visser. Declaratively defining domain-specific language debuggers. *ACM SIGPLAN Notices*, 47(3):127–136, March 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Arnoldus:2012:LMU

[799] B. J. Arnoldus, M. G. J. van den Brand, and A. Serebrenik. Less is more: unparser-completeness of metalanguages for template engines. *ACM SIGPLAN Notices*, 47(3):137–146, March 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Slaatten:2012:TAG

[800] Vidar Slåtten, Frank Alexander Kraemer, and Peter Herrmann. Towards automatic generation of formal specifications to validate and verify reliable distributed systems: a method exemplified by an industrial case study. *ACM SIGPLAN Notices*, 47(3):147–156, March 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Sobernig:2012:CCA

[801] Stefan Sobernig, Patrick Gaubatz, Mark Strembeck, and Uwe Zdun. Comparing complexity of API designs: an exploratory experiment on DSL-based framework integration. *ACM SIGPLAN Notices*, 47(3):157–166, March 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Erdweg:2012:GLE

[802] Sebastian Erdweg, Lennart C. L. Kats, Tillmann Rendel, Christian Kästner, Klaus Ostermann, and Eelco Visser. Growing a language environment with editor libraries. *ACM SIGPLAN Notices*, 47(3):167–176, March 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Freeman:2012:HPH

[803] John Freeman, Jaakko Järvi, Wonseok Kim, Mat Marcus, and Sean Parent. Helping programmers help users. *ACM SIGPLAN Notices*, 47(3):177–184, March 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Launchbury:2012:TBC

[804] John Launchbury. Theorem-based circuit derivation in Cryptol. *ACM SIGPLAN Notices*, 47(3):185–186, March 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Larus:2012:CWC

[805] James R. Larus. The cloud will change everything. *ACM SIGPLAN Notices*,

47(4):1–2, April 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Yuan:2012:ISD

[806] Ding Yuan, Jing Zheng, Soyeon Park, Yuanyuan Zhou, and Stefan Savage. Improving software diagnosability via log enhancement. *ACM SIGPLAN Notices*, 47(4):3–14, April 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Veeraraghavan:2012:DPS

[807] Kaushik Veeraraghavan, Dongyoon Lee, Benjamin Wester, Jessica Ouyang, Peter M. Chen, Jason Flinn, and Satish Narayanasamy. DoublePlay: parallelizing sequential logging and replay. *ACM SIGPLAN Notices*, 47(4):15–26, April 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Casper:2012:HAT

[808] Jared Casper, Tayo Oguntebi, Sungpack Hong, Nathan G. Bronson, Christos Kozyrakis, and Kunle Olukotun. Hardware acceleration of transactional memory on commodity systems. *ACM SIGPLAN Notices*, 47(4):27–38, April 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Dalessandro:2012:HNC

[809] Luke Dalessandro, François Carouge, Sean White, Yossi Lev, Mark Moir, Michael L. Scott, and Michael F. Spear. Hybrid NOrec: a case study in the effectiveness of best effort hardware transactional memory. *ACM SIGPLAN Notices*, 47(4):39–52, April 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Singh:2012:EPS

[810] Abhayendra Singh, Daniel Marino, Satish Narayanasamy, Todd Millstein, and Madan Musuvathi. Efficient processor support for DRFx, a memory model with exceptions. *ACM SIGPLAN Notices*, 47(4):53–66, April 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Devietti:2012:RRC

[811] Joseph Devietti, Jacob Nelson, Tom Bergan, Luis Ceze, and Dan Grossman. RCDC: a relaxed consistency deterministic computer. *ACM SIGPLAN Notices*, 47(4):67–78, April 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Burnim:2012:SCS

[812] Jacob Burnim, George Necula, and Koushik Sen. Specifying and checking semantic atomicity for multithreaded programs. *ACM SIGPLAN Notices*, 47 (4):79–90, April 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Volos:2012:MLP

[813] Haris Volos, Andres Jaan Tack, and Michael M. Swift. Mnemosyne: lightweight persistent memory. *ACM SIGPLAN Notices*, 47(4):91–104, April 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Coburn:2012:NHM

[814] Joel Coburn, Adrian M. Caulfield, Ameen Akel, Laura M. Grupp, Rajesh K. Gupta, Ranjit Jhala, and Steven Swanson. NV-Heaps: making persistent objects fast and safe with next-generation, non-volatile memories. *ACM SIGPLAN Notices*, 47(4): 105–118, April 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Schupbach:2012:DLA

[815] Adrian Schüpbach, Andrew Baumann, Timothy Roscoe, and Simon Peter. A declarative language approach to device configuration. *ACM SIGPLAN Notices*, 47(4):119–132, April 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Ryzhyk:2012:IDD

[816] Leonid Ryzhyk, John Keys, Balachandra Mirla, Arun Raghunath, Mona Vij, and Gernot Heiser. Improved device driver reliability through hardware verification reuse. *ACM SIGPLAN Notices*, 47(4):133–144, April 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Hashmi:2012:CNI

[817] Atif Hashmi, Andrew Nere, James Jamal Thomas, and Mikko Lipasti. A case for neuromorphic ISAs. *ACM SIGPLAN Notices*, 47(4):145–158, April 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Ransford:2012:MSS

[818] Benjamin Ransford, Jacob Sorber, and Kevin Fu. Mementos: system support for long-running computation on RFID-scale devices. *ACM SIGPLAN Notices*, 47(4):159–170, April 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Koukoumidis:2012:PC

[819] Emmanouil Koukoumidis, Dimitrios Lymberopoulos, Karin Strauss, Jie Liu, and Doug Burger. Pocket cloudlets. *ACM SIGPLAN Notices*, 47(4):171–184, April 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Sharma:2012:BMS

[820] Navin Sharma, Sean Barker, David Irwin, and Prashant Shenoy. Blink: managing server clusters on intermittent power. *ACM SIGPLAN Notices*, 47 (4):185–198, April 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Hoffmann:2012:DKR

[821] Henry Hoffmann, Stelios Sidiroglou, Michael Carbin, Sasa Misailovic, Anant Agarwal, and Martin Rinard. Dynamic knobs for responsive power-aware computing. *ACM SIGPLAN Notices*, 47 (4):199–212, April 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Liu:2012:FSD

[822] Song Liu, Karthik Pattabiraman, Thomas Moscibroda, and Benjamin G.

Zorn. Flikker: saving DRAM refresh-power through critical data partitioning. *ACM SIGPLAN Notices*, 47(4): 213–224, April 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Deng:2012:MAL

[823] Qingyuan Deng, David Meisner, Luiz Ramos, Thomas F. Wenisch, and Ricardo Bianchini. MemScale: active low-power modes for main memory. *ACM SIGPLAN Notices*, 47(4): 225–238, April 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Gao:2012:TMH

[824] Qi Gao, Wenbin Zhang, Zhezhe Chen, Mai Zheng, and Feng Qin. 2nd-Strike: toward manifesting hidden concurrency typestate bugs. *ACM SIGPLAN Notices*, 47(4):239–250, April 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Zhang:2012:CDC

[825] Wei Zhang, Junghee Lim, Ramya Olichandran, Joel Scherpelz, Guoliang Jin, Shan Lu, and Thomas Reps. ConSeq: detecting concurrency bugs through sequential errors. *ACM SIGPLAN Notices*, 47(4):251–264, April 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Chipounov:2012:SPV

[826] Vitaly Chipounov, Volodymyr Kuznetsov, and George Candea. S2E: a platform for in-vivo multi-path analysis of software systems. *ACM SIGPLAN Notices*, 47(4):265–278, April 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Hofmann:2012:EOS

[827] Owen S. Hofmann, Alan M. Dunn, Sangman Kim, Indrajit Roy, and Emmett Witchel. Ensuring operating system kernel integrity with OSck. *ACM SIGPLAN Notices*, 47(4):279–290, April 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Porter:2012:RLT

[828] Donald E. Porter, Silas Boyd-Wickizer, Jon Howell, Reuben Olinsky, and Galen C. Hunt. Rethinking the library OS from the top down. *ACM SIGPLAN Notices*, 47(4):291–304, April 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Palix:2012:FLT

[829] Nicolas Palix, Gaël Thomas, Suman Saha, Christophe Calvès, Julia Lawall, and Gilles Muller. Faults in Linux: ten years later. *ACM SIGPLAN Notices*, 47(4):305–318, April 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Esmaeilzadeh:2012:LBL

[830] Hadi Esmaeilzadeh, Ting Cao, Yang Xi, Stephen M. Blackburn, and Kathryn S. McKinley. Looking back on the language and hardware revolutions: measured power, performance, and scaling. *ACM SIGPLAN Notices*, 47

(4):319–332, April 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Nguyen:2012:SCS

[831] Donald Nguyen and Keshav Pingali. Synthesizing concurrent schedulers for irregular algorithms. *ACM SIGPLAN Notices*, 47(4):333–344, April 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Hoang:2012:ECT

[832] Giang Hoang, Robby Bruce Findler, and Russ Joseph. Exploring circuit timing-aware language and compilation. *ACM SIGPLAN Notices*, 47(4): 345–356, April 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Farhad:2012:OAM

[833] Sardar M. Farhad, Yousun Ko, Bernd Burgstaller, and Bernhard Scholz. Orchestration by approximation: mapping stream programs onto multicore architectures. *ACM SIGPLAN Notices*, 47(4):357–368, April 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Zhang:2012:FED

[834] Eddy Z. Zhang, Yunlian Jiang, Ziyu Guo, Kai Tian, and Xipeng Shen. On-the-fly elimination of dynamic irregularities for GPU computing. *ACM SIGPLAN Notices*, 47(4):369–380, April 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Hormati:2012:SPS

[835] Amir H. Hormati, Mehrzad Samadi, Mark Woh, Trevor Mudge, and Scott Mahlke. Sponge: portable stream programming on graphics engines. *ACM SIGPLAN Notices*, 47(4):381–392, April 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Kamruzzaman:2012:ICP

[836] Md Kamruzzaman, Steven Swanson, and Dean M. Tullsen. Inter-core prefetching for multicore processors using migrating helper threads. *ACM SIGPLAN Notices*, 47(4):393–404, April 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Hayashizaki:2012:IPT

[837] Hiroshige Hayashizaki, Peng Wu, Hiroshi Inoue, Mauricio J. Serrano, and Toshio Nakatani. Improving the performance of trace-based systems by false loop filtering. *ACM SIGPLAN Notices*, 47(4):405–418, April 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Xue:2012:RJC

[838] Jingling Xue. Rethinking Java call stack design for tiny embedded devices. *ACM SIGPLAN Notices*, 47(5):1–10, May 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). LCTES '12 proceedings.

Sallenave:2012:LGE

[839] Olivier Sallenave and Roland Ducournau. Lightweight generics in embedded

systems through static analysis. *ACM SIGPLAN Notices*, 47(5):11–20, May 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). LCTES '12 proceedings.

Kyle:2012:EPI

[840] Stephen Kyle, Igor Böhm, Björn Franke, Hugh Leather, and Nigel Topham. Efficiently parallelizing instruction set simulation of embedded multi-core processors using region-based just-in-time dynamic binary translation. *ACM SIGPLAN Notices*, 47(5):21–30, May 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). LCTES '12 proceedings.

Huang:2012:WAR

[841] Yazhi Huang, Mengying Zhao, and Chun Jason Xue. WCET-aware rescheduling register allocation for real-time embedded systems with clustered VLIW architecture. *ACM SIGPLAN Notices*, 47(5):31–40, May 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). LCTES '12 proceedings.

Wan:2012:WAD

[842] Qing Wan, Hui Wu, and Jingling Xue. WCET-aware data selection and allocation for scratchpad memory. *ACM SIGPLAN Notices*, 47(5):41–50, May 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). LCTES '12 proceedings.

Gerard:2012:MMO

[843] Léonard Gérard, Adrien Guatto, Cédric Pasteur, and Marc Pouzet. A modular memory optimization for synchronous data-flow languages: application to arrays in a Lustre compiler. *ACM SIGPLAN Notices*, 47(5):51–60, May 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). LCTES '12 proceedings.

Sbirlea:2012:MDF

[844] Alina Sbîrlea, Yi Zou, Zoran Budimlíc, Jason Cong, and Vivek Sarkar. Mapping a data-flow programming model onto heterogeneous platforms. *ACM SIGPLAN Notices*, 47(5):61–70, May 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). LCTES '12 proceedings.

Hashemi:2012:FSU

[845] Matin Hashemi, Mohammad H. Foroozannejad, Soheil Ghiasi, and Christoph Etzel. FORMLESS: scalable utilization of embedded manycores in streaming applications. *ACM SIGPLAN Notices*, 47(5):71–78, May 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). LCTES '12 proceedings.

Farhad:2012:PGD

[846] S. M. Farhad, Yousun Ko, Bernd Burgstaller, and Bernhard Scholz. Profile-guided deployment of stream programs on multicores. *ACM SIGPLAN Notices*, 47(5):79–88, May 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). LCTES '12 proceedings.

Fang:2012:IDP

[847] Zhenman Fang, Jiaxin Li, Weihua Zhang, Yi Li, Haibo Chen, and Binyu Zang. Improving dynamic prediction accuracy through multi-level phase analysis. *ACM SIGPLAN Notices*, 47 (5):89–98, May 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). LCTES '12 proceedings.

Khudia:2012:ESE

[848] Daya Shanker Khudia, Griffin Wright, and Scott Mahlke. Efficient soft error protection for commodity embedded microprocessors using profile information. *ACM SIGPLAN Notices*, 47 (5):99–108, May 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). LCTES '12 proceedings.

Li:2012:CAP

[849] Qingan Li, Mengying Zhao, Chun Jason Xue, and Yanxiang He. Compiler-assisted preferred caching for embedded systems with STT–RAM based hybrid cache. *ACM SIGPLAN Notices*, 47(5):109–118, May 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). LCTES '12 proceedings.

Zuluaga:2012:SDS

[850] Marcela Zuluaga, Andreas Krause, Peter Milder, and Markus Püschel. "smart" design space sampling to predict Pareto-optimal solutions. *ACM SIGPLAN Notices*, 47(5):119–128, May 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). LCTES '12 proceedings.

Bouissou:2012:OSS

[851] Olivier Bouissou and Alexandre Chapoutot. An operational semantics for Simulink's simulation engine. *ACM SIGPLAN Notices*, 47(5):129–138, May 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). LCTES '12 proceedings.

Yu:2012:SCC

[852] Fang Yu, Shun-Ching Yang, Farn Wang, Guan-Cheng Chen, and Che-Chang Chan. Symbolic consistency checking of OpenMP parallel programs. *ACM SIGPLAN Notices*, 47 (5):139–148, May 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). LCTES '12 proceedings.

Gal-On:2012:CPR

[853] Shay Gal-On and Markus Levy. Creating portable, repeatable, realistic benchmarks for embedded systems and the challenges thereof. *ACM SIGPLAN Notices*, 47(5):149–152, May 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). LCTES '12 proceedings.

Hosking:2012:CHL

[854] Tony Hosking. Compiling a high-level language for GPUs: (via language support for architectures and compilers). *ACM SIGPLAN Notices*, 47(6):1–12, June 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PLDI '12 proceedings.

Samadi:2012:AIA

[855] Mehrzad Samadi, Amir Hormati, Mojtaba Mehrara, Janghaeng Lee, and Scott Mahlke. Adaptive input-aware compilation for graphics engines. *ACM SIGPLAN Notices*, 47(6):13–22, June 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PLDI '12 proceedings.

Bacon:2012:TTW

[856] David F. Bacon, Perry Cheng, and Sunil Shukla. And then there were none: a stall-free real-time garbage collector for reconfigurable hardware. *ACM SIGPLAN Notices*, 47(6):23–34, June 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PLDI '12 proceedings.

Oliveira:2012:ICN

[857] Bruno C. d. S. Oliveira, Tom Schrijvers, Wontae Choi, Wonchan Lee, and Kwangkeun Yi. The implicit calculus: a new foundation for generic programming. *ACM SIGPLAN Notices*, 47(6):35–44, June 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PLDI '12 proceedings.

Kawaguchi:2012:DPL

[858] Ming Kawaguchi, Patrick Rondon, Alexander Bakst, and Ranjit Jhala. Deterministic parallelism via liquid effects. *ACM SIGPLAN Notices*, 47 (6):45–54, June 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PLDI '12 proceedings.

Guerraoui:2012:SL

[859] Rachid Guerraoui, Viktor Kuncak, and Giuliano Losa. Speculative linearizability. *ACM SIGPLAN Notices*, 47 (6):55–66, June 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PLDI '12 proceedings.

Zaparanuks:2012:AP

[860] Dmitrijs Zaparanuks and Matthias Hauswirth. Algorithmic profiling. *ACM SIGPLAN Notices*, 47(6):67–76, June 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PLDI '12 proceedings.

Jin:2012:UDR

[861] Guoliang Jin, Linhai Song, Xiaoming Shi, Joel Scherpelz, and Shan Lu. Understanding and detecting real-world performance bugs. *ACM SIGPLAN Notices*, 47(6):77–88, June 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PLDI '12 proceedings.

Coppa:2012:ISP

[862] Emilio Coppa, Camil Demetrescu, and Irene Finocchi. Input-sensitive profiling. *ACM SIGPLAN Notices*, 47 (6):89–98, June 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PLDI '12 proceedings.

Zhang:2012:LBC

[863] Danfeng Zhang, Aslan Askarov, and Andrew C. Myers. Language-based control and mitigation of timing channels. *ACM SIGPLAN Notices*, 47(6):

99–110, June 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PLDI '12 proceedings.

Chiw:2012:DPD

[864] Charisee Chiw, Gordon Kindlmann, John Reppy, Lamont Samuels, and Nick Seltzer. Diderot: a parallel DSL for image analysis and visualization. *ACM SIGPLAN Notices*, 47(6): 111–120, June 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PLDI '12 proceedings.

Cartey:2012:SGC

[865] Luke Cartey, Rune Lyngsø, and Oege de Moor. Synthesising graphics card programs from DSLs. *ACM SIGPLAN Notices*, 47(6):121–132, June 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PLDI '12 proceedings.

Raman:2012:PSF

[866] Arun Raman, Ayal Zaks, Jae W. Lee, and David I. August. Parcae: a system for flexible parallel execution. *ACM SIGPLAN Notices*, 47(6): 133–144, June 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PLDI '12 proceedings.

Tripp:2012:JEP

[867] Omer Tripp, Roman Manevich, John Field, and Mooly Sagiv. JANUS: exploiting parallelism via hindsight. *ACM SIGPLAN Notices*, 47(6):145–156, June 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PLDI '12 proceedings.

Turon:2012:REC

[868] Aaron Turon. Reagents: expressing and composing fine-grained concurrency. *ACM SIGPLAN Notices*, 47 (6):157–168, June 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PLDI '12 proceedings.

Carbin:2012:PAP

[869] Michael Carbin, Deokhwan Kim, Sasa Misailovic, and Martin C. Rinard. Proving acceptability properties of relaxed nondeterministic approximate programs. *ACM SIGPLAN Notices*, 47 (6):169–180, June 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PLDI '12 proceedings.

Dillig:2012:AED

[870] Isil Dillig, Thomas Dillig, and Alex Aiken. Automated error diagnosis using abductive inference. *ACM SIGPLAN Notices*, 47(6):181–192, June 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PLDI '12 proceedings.

Kuznetsov:2012:ESM

[871] Volodymyr Kuznetsov, Johannes Kinder, Stefan Bucur, and George Candea. Efficient state merging in symbolic execution. *ACM SIGPLAN Notices*, 47 (6):193–204, June 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PLDI '12 proceedings.

Wu:2012:SPA

[872] Jingyue Wu, Yang Tang, Gang Hu, Heming Cui, and Junfeng Yang. Sound and precise analysis of parallel programs through schedule specialization. *ACM SIGPLAN Notices*, 47(6):205–216, June 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PLDI '12 proceedings.

Albarghouthi:2012:PTI

[873] Aws Albarghouthi, Rahul Kumar, Aditya V. Nori, and Sriram K. Rajamani. Parallelizing top-down interprocedural analyses. *ACM SIGPLAN Notices*, 47(6):217–228, June 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PLDI '12 proceedings.

Oh:2012:DIS

[874] Hakjoo Oh, Kihong Heo, Wonchan Lee, Woosuk Lee, and Kwangkeun Yi. Design and implementation of sparse global analyses for C-like languages. *ACM SIGPLAN Notices*, 47 (6):229–238, June 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PLDI '12 proceedings.

Hackett:2012:FPH

[875] Brian Hackett and Shu yu Guo. Fast and precise hybrid type inference for JavaScript. *ACM SIGPLAN Notices*, 47(6):239–250, June 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PLDI '12 proceedings.

Petrov:2012:RDW

[876] Boris Petrov, Martin Vechev, Manu Sridharan, and Julian Dolby. Race detection for Web applications. *ACM SIGPLAN Notices*, 47(6):251–262, June 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PLDI '12 proceedings.

Fischer:2012:EDM

[877] Jeffrey Fischer, Rupak Majumdar, and Shahram Esmaeilsabzali. Engage: a deployment management system. *ACM SIGPLAN Notices*, 47(6): 263–274, June 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PLDI '12 proceedings.

Perelman:2012:TDC

[878] Daniel Perelman, Sumit Gulwani, Thomas Ball, and Dan Grossman. Type-directed completion of partial expressions. *ACM SIGPLAN Notices*, 47 (6):275–286, June 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PLDI '12 proceedings.

hunEom:2012:SSJ

[879] Yong hun Eom and Brian Demsky. Self-stabilizing Java. *ACM SIGPLAN Notices*, 47(6):287–298, June 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PLDI '12 proceedings.

Chen:2012:TDA

[880] Yan Chen, Joshua Dunfield, and Umut A. Acar. Type-directed automatic incrementalization. *ACM SIGPLAN Notices*, 47(6):299–310, June

2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PLDI '12 proceedings.

Sarkar:2012:SCC

[881] Susmit Sarkar, Kayvan Memarian, Scott Owens, Mark Batty, Peter Sewell, Luc Maranget, Jade Alglave, and Derek Williams. Synchronising C/C++ and POWER. *ACM SIGPLAN Notices*, 47(6):311–322, June 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PLDI '12 proceedings.

Gazzillo:2012:SPA

[882] Paul Gazzillo and Robert Grimm. SuperC: parsing all of C by taming the preprocessor. *ACM SIGPLAN Notices*, 47(6):323–334, June 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PLDI '12 proceedings.

Regehr:2012:TCR

[883] John Regehr, Yang Chen, Pascal Cuoq, Eric Eide, Chucky Ellison, and Xuejun Yang. Test-case reduction for C compiler bugs. *ACM SIGPLAN Notices*, 47 (6):335–346, June 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PLDI '12 proceedings.

Liu:2012:CFE

[884] Jun Liu, Yuanrui Zhang, Ohyoung Jang, Wei Ding, and Mahmut Kandemir. A compiler framework for extracting superword level parallelism. *ACM SIGPLAN Notices*, 47(6):347–358, June 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PLDI '12 proceedings.

Johnson:2012:SSP

[885] Nick P. Johnson, Hanjun Kim, Prakash Prabhu, Ayal Zaks, and David I. August. Speculative separation for privatization and reductions. *ACM SIGPLAN Notices*, 47(6):359–370, June 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PLDI '12 proceedings.

Holewinski:2012:DTB

[886] Justin Holewinski, Ragavendar Ramamurthi, Mahesh Ravishankar, Naznin Fauzia, Louis-Noël Pouchet, Atanas Rountev, and P. Sadayappan. Dynamic trace-based analysis of vectorization potential of applications. *ACM SIGPLAN Notices*, 47(6):371–382, June 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PLDI '12 proceedings.

Leung:2012:VGK

[887] Alan Leung, Manish Gupta, Yuvraj Agarwal, Rajesh Gupta, Ranjit Jhala, and Sorin Lerner. Verifying GPU kernels by test amplification. *ACM SIGPLAN Notices*, 47(6):383–394, June 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PLDI '12 proceedings.

Morrisett:2012:RBF

[888] Greg Morrisett, Gang Tan, Joseph Tassarotti, Jean-Baptiste Tristan, and Edward Gan. RockSalt: better, faster,

stronger SFI for the x86. *ACM SIGPLAN Notices*, 47(6):395–404, June 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PLDI '12 proceedings.

Grebenshchikov:2012:SSV

[889] Sergey Grebenshchikov, Nuno P. Lopes, Corneliu Popeea, and Andrey Rybalchenko. Synthesizing software verifiers from proof rules. *ACM SIGPLAN Notices*, 47(6):405–416, June 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PLDI '12 proceedings.

Hawkins:2012:CDR

[890] Peter Hawkins, Alex Aiken, Kathleen Fisher, Martin Rinard, and Mooly Sagiv. Concurrent data representation synthesis. *ACM SIGPLAN Notices*, 47 (6):417–428, June 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PLDI '12 proceedings.

Liu:2012:DSR

[891] Feng Liu, Nayden Nedev, Nedyalko Prisadnikov, Martin Vechev, and Eran Yahav. Dynamic synthesis for relaxed memory models. *ACM SIGPLAN Notices*, 47(6):429–440, June 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PLDI '12 proceedings.

Godefroid:2012:ASS

[892] Patrice Godefroid and Ankur Taly. Automated synthesis of symbolic instruction encodings from I/O samples. *ACM SIGPLAN Notices*, 47(6): 441–452, June 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PLDI '12 proceedings.

Benz:2012:DPA

[893] Florian Benz, Andreas Hildebrandt, and Sebastian Hack. A dynamic program analysis to find floating-point accuracy problems. *ACM SIGPLAN Notices*, 47(6):453–462, June 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PLDI '12 proceedings.

Lee:2012:CHP

[894] Dongyoon Lee, Peter M. Chen, Jason Flinn, and Satish Narayanasamy. Chimera: hybrid program analysis for determinism. *ACM SIGPLAN Notices*, 47(6):463–474, June 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PLDI '12 proceedings.

deKruijf:2012:SAC

[895] Marc A. de Kruijf, Karthikeyan Sankaralingam, and Somesh Jha. Static analysis and compiler design for idempotent processing. *ACM SIGPLAN Notices*, 47(6):475–486, June 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PLDI '12 proceedings.

Feng:2012:EPL

[896] Min Feng, Rajiv Gupta, and Iulian Neamtiu. Effective parallelization of loops in the presence of I/O operations. *ACM SIGPLAN Notices*, 47(6):

487–498, June 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PLDI '12 proceedings.

Chen:2012:PSR

[897] Chun Chen. Polyhedra scanning revisited. *ACM SIGPLAN Notices*, 47 (6):499–508, June 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PLDI '12 proceedings.

Oancea:2012:LIT

[898] Cosmin E. Oancea and Lawrence Rauchwerger. Logical inference techniques for loop parallelization. *ACM SIGPLAN Notices*, 47(6):509–520, June 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PLDI '12 proceedings.

Pradel:2012:FAP

[899] Michael Pradel and Thomas R. Gross. Fully automatic and precise detection of thread safety violations. *ACM SIGPLAN Notices*, 47(6):521–530, June 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PLDI '12 proceedings.

Raman:2012:SPD

[900] Raghavan Raman, Jisheng Zhao, Vivek Sarkar, Martin Vechev, and Eran Yahav. Scalable and precise dynamic datarace detection for structured parallelism. *ACM SIGPLAN Notices*, 47 (6):531–542, June 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PLDI '12 proceedings.

Nagarakatte:2012:MAP

[901] Santosh Nagarakatte, Sebastian Burckhardt, Milo M. K. Martin, and Madanlal Musuvathi. Multicore acceleration of priority-based schedulers for concurrency bug detection. *ACM SIGPLAN Notices*, 47(6):543–554, June 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PLDI '12 proceedings.

Nieh:2012:CBR

[902] Jason Nieh. Challenges in building a real, large private cloud. *ACM SIGPLAN Notices*, 47(7):1–2, July 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). VEE '12 conference proceedings.

Kundu:2012:MVA

[903] Sajib Kundu, Raju Rangaswami, Ajay Gulati, Ming Zhao, and Kaushik Dutta. Modeling virtualized applications using machine learning techniques. *ACM SIGPLAN Notices*, 47 (7):3–14, July 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). VEE '12 conference proceedings.

Lv:2012:VCV

[904] Hui Lv, Yaozu Dong, Jiangang Duan, and Kevin Tian. Virtualization challenges: a view from server consolidation perspective. *ACM SIGPLAN Notices*, 47(7):15–26, July 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). VEE '12 conference proceedings.

Wang:2012:RCV

[905] Wei Wang, Tanima Dey, Ryan W. Moore, Mahmut Aktasoglu, Bruce R. Childers, Jack W. Davidson, Mary Jane Irwin, Mahmut Kandemir, and Mary Lou Soffa. REEact: a customizable virtual execution manager for multicore platforms. *ACM SIGPLAN Notices*, 47(7):27–38, July 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). VEE '12 conference proceedings.

Ma:2012:DTD

[906] Zhiqiang Ma, Zhonghua Sheng, Lin Gu, Liufei Wen, and Gong Zhang. DVM: towards a datacenter-scale virtual machine. *ACM SIGPLAN Notices*, 47 (7):39–50, July 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). VEE '12 conference proceedings.

Yu:2012:SCO

[907] Tingting Yu, Witawas Srisa-an, and Gregg Rothermel. SimTester: a controllable and observable testing framework for embedded systems. *ACM SIGPLAN Notices*, 47(7):51–62, July 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). VEE '12 conference proceedings.

Zhang:2012:SRB

[908] Yuan Zhang, Min Yang, Bo Zhou, Zhemin Yang, Weihua Zhang, and Binyu Zang. Swift: a register-based JIT compiler for embedded JVMs. *ACM SIGPLAN Notices*, 47(7):63–74, July 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). VEE '12 conference proceedings.

Shan:2012:FIA

[909] Zhiyong Shan, Xin Wang, Tzi cker Chiueh, and Xiaofeng Meng. Facilitating inter-application interactions for OS-level virtualization. *ACM SIGPLAN Notices*, 47(7):75–86, July 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). VEE '12 conference proceedings.

Gerofi:2012:ETT

[910] Balazs Gerofi and Yutaka Ishikawa. Enhancing TCP throughput of highly available virtual machines via speculative communication. *ACM SIGPLAN Notices*, 47(7):87–96, July 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). VEE '12 conference proceedings.

Rajagopalan:2012:SDT

[911] Shriram Rajagopalan, Brendan Cully, Ryan O'Connor, and Andrew Warfield. SecondSite: disaster tolerance as a service. *ACM SIGPLAN Notices*, 47 (7):97–108, July 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). VEE '12 conference proceedings.

Pan:2012:CLM

[912] Zhenhao Pan, Yaozu Dong, Yu Chen, Lei Zhang, and Zhijiao Zhang. CompSC: live migration with pass-through devices. *ACM SIGPLAN Notices*, 47(7):109–120, July 2012. CODEN SINODQ. ISSN 0362-1340

(print), 1523-2867 (print), 1558-1160 (electronic). VEE '12 conference proceedings.

Kemerlis:2012:LPD

[913] Vasileios P. Kemerlis, Georgios Portokalidis, Kangkook Jee, and Angelos D. Keromytis. `libdft`: practical dynamic data flow tracking for commodity systems. *ACM SIGPLAN Notices*, 47(7):121–132, July 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). VEE '12 conference proceedings.

Bruening:2012:TDI

[914] Derek Bruening, Qin Zhao, and Saman Amarasinghe. Transparent dynamic instrumentation. *ACM SIGPLAN Notices*, 47(7):133–144, July 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). VEE '12 conference proceedings.

Lefebvre:2012:EM

[915] Geoffrey Lefebvre, Brendan Cully, Christopher Head, Mark Spear, Norm Hutchinson, Mike Feeley, and Andrew Warfield. Execution mining. *ACM SIGPLAN Notices*, 47(7):145–158, July 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). VEE '12 conference proceedings.

Pavlou:2012:DBD

[916] Demos Pavlou, Enric Gibert, Fernando Latorre, and Antonio Gonzalez. DDGacc: boosting dynamic DDG-based binary optimizations through specialized hardware support. *ACM SIGPLAN Notices*, 47(7):159–168, July 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). VEE '12 conference proceedings.

Ishizaki:2012:ADT

[917] Kazuaki Ishizaki, Takeshi Ogasawara, Jose Castanos, Priya Nagpurkar, David Edelsohn, and Toshio Nakatani. Adding dynamically-typed language support to a statically-typed language compiler: performance evaluation, analysis, and tradeoffs. *ACM SIGPLAN Notices*, 47(7):169–180, July 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). VEE '12 conference proceedings.

Lin:2012:UKT

[918] Yi Lin, Stephen M. Blackburn, and Daniel Frampton. Unpicking the knot: teasing apart VM/application interdependencies. *ACM SIGPLAN Notices*, 47(7):181–190, July 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). VEE '12 conference proceedings.

Tuch:2012:BSV

[919] Harvey Tuch, Cyprien Laplace, Kenneth C. Barr, and Bi Wu. Block storage virtualization with commodity secure digital cards. *ACM SIGPLAN Notices*, 47(7):191–202, July 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). VEE '12 conference proceedings.

Ghosh:2012:RAA

[920] Sudeep Ghosh, Jason Hiser, and Jack W. Davidson. Replacement attacks against VM-protected applications. *ACM SIGPLAN Notices*, 47 (7):203–214, July 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). VEE '12 conference proceedings.

Payer:2012:PAA

[921] Mathias Payer and Thomas R. Gross. Protecting applications against TOCTTOU races by user-space caching of file metadata. *ACM SIGPLAN Notices*, 47 (7):215–226, July 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). VEE '12 conference proceedings.

Yan:2012:VCH

[922] Lok-Kwong Yan, Manjukumar Jayachandra, Mu Zhang, and Heng Yin. V2E: combining hardware virtualization and software emulation for transparent and extensible malware analysis. *ACM SIGPLAN Notices*, 47(7): 227–238, July 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). VEE '12 conference proceedings.

Huynh:2012:SFM

[923] Huynh Phung Huynh, Andrei Hagiescu, Weng-Fai Wong, and Rick Siow Mong Goh. Scalable framework for mapping streaming applications onto multi-GPU systems. *ACM SIGPLAN Notices*, 47(8):1–10, August 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PPOPP '12 conference proceedings.

Sim:2012:PAF

[924] Jaewoong Sim, Aniruddha Dasgupta, Hyesoon Kim, and Richard Vuduc. A performance analysis framework for identifying potential benefits in GPGPU applications. *ACM SIGPLAN Notices*, 47(8):11–22, August 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PPOPP '12 conference proceedings.

Baghsorkhi:2012:EPE

[925] Sara S. Baghsorkhi, Isaac Gelado, Matthieu Delahaye, and Wen mei W. Hwu. Efficient performance evaluation of memory hierarchy for highly multithreaded graphics processors. *ACM SIGPLAN Notices*, 47(8): 23–34, August 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PPOPP '12 conference proceedings.

Ballard:2012:CAS

[926] Grey Ballard, James Demmel, and Nicholas Knight. Communication avoiding successive band reduction. *ACM SIGPLAN Notices*, 47(8):35–44, August 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PPOPP '12 conference proceedings.

Sack:2012:FTA

[927] Paul Sack and William Gropp. Faster topology-aware collective algorithms through non-minimal communication. *ACM SIGPLAN Notices*, 47(8):45–54, August 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PPOPP '12 conference proceedings.

Kim:2012:ESC

[928] Seonggun Kim and Hwansoo Han. Efficient SIMD code generation for irregular kernels. *ACM SIGPLAN Notices*, 47(8):55–64, August 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PPOPP '12 conference proceedings.

Leissa:2012:ECL

[929] Roland Leißa, Sebastian Hack, and Ingo Wald. Extending a C-like language for portable SIMD programming. *ACM SIGPLAN Notices*, 47(8):65–74, August 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PPOPP '12 conference proceedings.

Kwon:2012:HAO

[930] Okwan Kwon, Fahed Jubair, Rudolf Eigenmann, and Samuel Midkiff. A hybrid approach of OpenMP for clusters. *ACM SIGPLAN Notices*, 47(8):75–84, August 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PPOPP '12 conference proceedings.

hunEom:2012:DDP

[931] Yong hun Eom, Stephen Yang, James C. Jenista, and Brian Demsky. DOJ: dynamically parallelizing object-oriented programs. *ACM SIGPLAN Notices*, 47(8):85–96, August 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PPOPP '12 conference proceedings.

Bonetta:2012:SLH

[932] Daniele Bonetta, Achille Peternier, Cesare Pautasso, and Walter Binder. S: a scripting language for high-performance RESTful Web services. *ACM SIGPLAN Notices*, 47(8):97–106, August 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PPOPP '12 conference proceedings.

Mendez-Lojo:2012:GII

[933] Mario Mendez-Lojo, Martin Burtscher, and Keshav Pingali. A GPU implementation of inclusion-based points-to analysis. *ACM SIGPLAN Notices*, 47 (8):107–116, August 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PPOPP '12 conference proceedings.

Merrill:2012:SGG

[934] Duane Merrill, Michael Garland, and Andrew Grimshaw. Scalable GPU graph traversal. *ACM SIGPLAN Notices*, 47(8):117–128, August 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PPOPP '12 conference proceedings.

Zu:2012:GBN

[935] Yuan Zu, Ming Yang, Zhonghu Xu, Lin Wang, Xin Tian, Kunyang Peng, and Qunfeng Dong. GPU-based NFA implementation for memory efficient high speed regular expression matching. *ACM SIGPLAN Notices*, 47(8): 129–140, August 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PPOPP '12 conference proceedings.

Kogan:2012:MCF

[936] Alex Kogan and Erez Petrank. A methodology for creating fast wait-free data structures. *ACM SIGPLAN Notices*, 47(8):141–150, August 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PPOPP '12 conference proceedings.

Prokopec:2012:CTE

[937] Aleksandar Prokopec, Nathan Grasso Bronson, Phil Bagwell, and Martin Odersky. Concurrent tries with efficient non-blocking snapshots. *ACM SIGPLAN Notices*, 47(8):151–160, August 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PPOPP '12 conference proceedings.

Crain:2012:SFB

[938] Tyler Crain, Vincent Gramoli, and Michel Raynal. A speculation-friendly binary search tree. *ACM SIGPLAN Notices*, 47(8):161–170, August 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PPOPP '12 conference proceedings.

Chen:2012:PUA

[939] Yifeng Chen, Xiang Cui, and Hong Mei. PARRAY: a unifying array representation for heterogeneous parallelism. *ACM SIGPLAN Notices*, 47(8): 171–180, August 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PPOPP '12 conference proceedings.

Blelloch:2012:IDP

[940] Guy E. Blelloch, Jeremy T. Fineman, Phillip B. Gibbons, and Julian Shun. Internally deterministic parallel algorithms can be fast. *ACM SIGPLAN Notices*, 47(8):181–192, August 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PPOPP '12 conference proceedings.

Leiserson:2012:DPR

[941] Charles E. Leiserson, Tao B. Schardl, and Jim Sukha. Deterministic parallel random-number generation for dynamic-multithreading platforms. *ACM SIGPLAN Notices*, 47(8):193–204, August 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PPOPP '12 conference proceedings.

Nobari:2012:SPM

[942] Sadegh Nobari, Thanh-Tung Cao, Panagiotis Karras, and Stéphane Bressan. Scalable parallel minimum spanning forest computation. *ACM SIGPLAN Notices*, 47(8):205–214, August 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PPOPP '12 conference proceedings.

Li:2012:GCV

[943] Guodong Li, Peng Li, Geof Sawaya, Ganesh Gopalakrishnan, Indradeep Ghosh, and Sreeranga P. Rajan. GKLEE: concolic verification and test generation for GPUs. *ACM SIGPLAN Notices*, 47(8):215–224, August 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160

(electronic). PPOPP '12 conference proceedings.

Du:2012:ABF

[944] Peng Du, Aurelien Bouteiller, George Bosilca, Thomas Herault, and Jack Dongarra. Algorithm-based fault tolerance for dense matrix factorizations. *ACM SIGPLAN Notices*, 47(8):225–234, August 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PPOPP '12 conference proceedings.

Buhler:2012:EDA

[945] Jeremy D. Buhler, Kunal Agrawal, Peng Li, and Roger D. Chamberlain. Efficient deadlock avoidance for streaming computation with filtering. *ACM SIGPLAN Notices*, 47(8):235–246, August 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PPOPP '12 conference proceedings.

Dice:2012:LCG

[946] David Dice, Virendra J. Marathe, and Nir Shavit. Lock cohorting: a general technique for designing NUMA locks. *ACM SIGPLAN Notices*, 47(8):247–256, August 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PPOPP '12 conference proceedings.

Fatourou:2012:RCS

[947] Panagiota Fatourou and Nikolaos D. Kallimanis. Revisiting the combining synchronization technique. *ACM SIGPLAN Notices*, 47(8):257–266, August 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PPOPP '12 conference proceedings.

Tardieu:2012:WSS

[948] Olivier Tardieu, Haichuan Wang, and Haibo Lin. A work-stealing scheduler for X10's task parallelism with suspension. *ACM SIGPLAN Notices*, 47(8):267–276, August 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PPOPP '12 conference proceedings.

Baskaran:2012:ACO

[949] Muthu Manikandan Baskaran, Nicolas Vasilache, Benoit Meister, and Richard Lethin. Automatic communication optimizations through memory reuse strategies. *ACM SIGPLAN Notices*, 47(8):277–278, August 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PPOPP '12 conference proceedings.

Liu:2012:FPA

[950] Gu Liu, Hong An, Wenting Han, Xiaoqiang Li, Tao Sun, Wei Zhou, Xuechao Wei, and Xulong Tang. FlexBFS: a parallelism-aware implementation of breadth-first search on GPU. *ACM SIGPLAN Notices*, 47(8):279–280, August 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PPOPP '12 conference proceedings.

Andersch:2012:PPE

[951] Michael Andersch, Chi Ching Chi, and Ben Juurlink. Programming parallel embedded and consumer applications in OpenMP superscalar. *ACM SIGPLAN Notices*, 47(8):281–282, August

2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PPOPP '12 conference proceedings.

Zhong:2012:OMS

[952] Jianlong Zhong and Bingsheng He. An overview of Medusa: simplified graph processing on GPUs. *ACM SIGPLAN Notices*, 47(8):283–284, August 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PPOPP '12 conference proceedings.

Alias:2012:ORA

[953] Christophe Alias, Alain Darte, and Alexandru Plesco. Optimizing remote accesses for offloaded kernels: application to high-level synthesis for FPGA. *ACM SIGPLAN Notices*, 47(8):285–286, August 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PPOPP '12 conference proceedings.

Tao:2012:UGA

[954] Jian Tao, Marek Blazewicz, and Steven R. Brandt. Using GPU's to accelerate stencil-based computation kernels for the development of large scale scientific applications on heterogeneous systems. *ACM SIGPLAN Notices*, 47(8):287–288, August 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PPOPP '12 conference proceedings.

Marker:2012:MED

[955] Bryan Marker, Andy Terrel, Jack Poulson, Don Batory, and Robert van de Geijn. Mechanizing the expert dense linear algebra developer. *ACM SIGPLAN Notices*, 47(8):289–290, August 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PPOPP '12 conference proceedings.

Nugteren:2012:BHM

[956] Cedric Nugteren and Henk Corporaal. The boat hull model: adapting the roofline model to enable performance prediction for parallel computing. *ACM SIGPLAN Notices*, 47(8): 291–292, August 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PPOPP '12 conference proceedings.

Feng:2012:SPG

[957] Min Feng, Rajiv Gupta, and Laxmi N. Bhuyan. Speculative parallelization on GPGPUs. *ACM SIGPLAN Notices*, 47(8):293–294, August 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PPOPP '12 conference proceedings.

Jimborean:2012:APM

[958] Alexandra Jimborean, Philippe Clauss, Benoît Pradelle, Luis Mastrangelo, and Vincent Loechner. Adapting the polyhedral model as a framework for efficient speculative parallelization. *ACM SIGPLAN Notices*, 47(8):295–296, August 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PPOPP '12 conference proceedings.

Gong:2012:OCN

[959] Yifan Gong, Bingsheng He, and Jianlong Zhong. An overview of CMPI:

network performance aware MPI in the cloud. *ACM SIGPLAN Notices*, 47(8): 297–298, August 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PPOPP '12 conference proceedings.

Kim:2012:OUP

[960] Jungwon Kim, Sangmin Seo, Jun Lee, Jeongho Nah, Gangwon Jo, and Jaejin Lee. OpenCL as a unified programming model for heterogeneous CPU/GPU clusters. *ACM SIGPLAN Notices*, 47(8):299–300, August 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PPOPP '12 conference proceedings.

Tzenakis:2012:BBL

[961] George Tzenakis, Angelos Papatriantafyllou, John Kesapides, Polyvios Pratikakis, Hans Vandierendonck, and Dimitrios S. Nikolopoulos. BDDT: block-level dynamic dependence analysis for deterministic task-based parallelism. *ACM SIGPLAN Notices*, 47(8): 301–302, August 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PPOPP '12 conference proceedings.

Kamil:2012:PPP

[962] Shoaib Kamil, Derrick Coetzee, Scott Beamer, Henry Cook, Ekaterina Gonina, Jonathan Harper, Jeffrey Morlan, and Armando Fox. Portable parallel performance from sequential, productive, embedded domain-specific languages. *ACM SIGPLAN Notices*, 47 (8):303–304, August 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PPOPP '12 conference proceedings.

Hoefler:2012:CCO

[963] Torsten Hoefler and Timo Schneider. Communication-centric optimizations by dynamically detecting collective operations. *ACM SIGPLAN Notices*, 47(8):305–306, August 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PPOPP '12 conference proceedings.

Zhang:2012:LLF

[964] Donghui Zhang and Per-Åke Larson. LHlf: lock-free linear hashing (poster paper). *ACM SIGPLAN Notices*, 47 (8):307–308, August 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PPOPP '12 conference proceedings.

Timnat:2012:WFL

[965] Shahar Timnat, Anastasia Braginsky, Alex Kogan, and Erez Petrank. Wait-free linked-lists. *ACM SIGPLAN Notices*, 47(8):309–310, August 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PPOPP '12 conference proceedings.

Dinh:2012:SPD

[966] Minh Ngoc Dinh, David Abramson, Chao Jin, Andrew Gontarek, Bob Moench, and Luiz DeRose. Scalable parallel debugging with statistical assertions. *ACM SIGPLAN Notices*, 47 (8):311–312, August 2012. CODEN SINODQ. ISSN 0362-1340 (print),

1523-2867 (print), 1558-1160 (electronic). PPOPP '12 conference proceedings.

Malkis:2012:VSB

[967] Alexander Malkis and Anindya Banerjee. Verification of software barriers. *ACM SIGPLAN Notices*, 47(8): 313–314, August 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PPOPP '12 conference proceedings.

Mittal:2012:CAS

[968] Anshul Mittal, Nikhil Jain, Thomas George, Yogish Sabharwal, and Sameer Kumar. Collective algorithms for sub-communicators. *ACM SIGPLAN Notices*, 47(8):315–316, August 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PPOPP '12 conference proceedings.

DeKoster:2012:SVE

[969] Joeri De Koster, Stefan Marr, and Theo D'Hondt. Synchronization views for event-loop actors. *ACM SIGPLAN Notices*, 47(8):317–318, August 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PPOPP '12 conference proceedings.

Metreveli:2012:CCP

[970] Zviad Metreveli, Nickolai Zeldovich, and M. Frans Kaashoek. CPHASH: a cache-partitioned hash table. *ACM SIGPLAN Notices*, 47(8):319–320, August 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PPOPP '12 conference proceedings.

Wernsing:2012:RHA

[971] John R. Wernsing and Greg Stitt. RACECAR: a heuristic for automatic function specialization on multi-core heterogeneous systems. *ACM SIGPLAN Notices*, 47(8):321–322, August 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PPOPP '12 conference proceedings.

Liu:2012:LFA

[972] Yujie Liu and Michael Spear. A lock-free, array-based priority queue. *ACM SIGPLAN Notices*, 47(8):323–324, August 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PPOPP '12 conference proceedings.

Noll:2012:IDO

[973] Albert Noll and Thomas R. Gross. An infrastructure for dynamic optimization of parallel programs. *ACM SIGPLAN Notices*, 47(8):325–326, August 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PPOPP '12 conference proceedings.

Kjolstad:2012:ADG

[974] Fredrik Kjolstad, Torsten Hoefler, and Marc Snir. Automatic datatype generation and optimization. *ACM SIGPLAN Notices*, 47(8):327–328, August 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PPOPP '12 conference proceedings.

Burnim:2012:NIN

[975] Jacob Burnim, Tayfun Elmas, George Necula, and Koushik Sen. NDetermin:

inferring nondeterministic sequential specifications for parallelism correctness. *ACM SIGPLAN Notices*, 47(8): 329–330, August 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PPOPP '12 conference proceedings.

Park:2012:CB

[976] Chang-Seo Park and Koushik Sen. Concurrent breakpoints. *ACM SIGPLAN Notices*, 47(8):331–332, August 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PPOPP '12 conference proceedings.

Stone:2012:EMP

[977] Andrew Stone, John Dennis, and Michelle Strout. Establishing a Miniapp as a programmability proxy. *ACM SIGPLAN Notices*, 47(8):333–334, August 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PPOPP '12 conference proceedings.

Jiang:2012:OSP

[978] Lei Jiang, Pragneshkumar B. Patel, George Ostrouchov, and Ferdinand Jamitzky. OpenMP-style parallelism in data-centered multicore computing with R. *ACM SIGPLAN Notices*, 47 (8):335–336, August 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PPOPP '12 conference proceedings.

Caniou:2012:PAP

[979] Yves Caniou, Daniel Diaz, Florian Richoux, Philippe Codognet, and Salvador Abreu. Performance analysis of parallel constraint-based local search. *ACM SIGPLAN Notices*, 47(8):337–338, August 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PPOPP '12 conference proceedings.

Thiemann:2012:ACE

[980] Peter Thiemann. AGDA-curious?: an exploration of programming with dependent types. *ACM SIGPLAN Notices*, 47(9):1–2, September 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Stewart:2012:VHT

[981] Gordon Stewart, Lennart Beringer, and Andrew W. Appel. Verified heap theorem prover by paramodulation. *ACM SIGPLAN Notices*, 47(9): 3–14, September 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Huffman:2012:FVM

[982] Brian Huffman. Formal verification of monad transformers. *ACM SIGPLAN Notices*, 47(9):15–16, September 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Dunfield:2012:EIU

[983] Joshua Dunfield. Elaborating intersection and union types. *ACM SIGPLAN Notices*, 47(9):17–28, September 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Chen:2012:ETT

[984] Sheng Chen, Martin Erwig, and Eric Walkingshaw. An error-tolerant type system for variational lambda calculus. *ACM SIGPLAN Notices*, 47(9): 29–40, September 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Krishnaswami:2012:SST

[985] Neelakantan R. Krishnaswami, Aaron Turon, Derek Dreyer, and Deepak Garg. Superficially substructural types. *ACM SIGPLAN Notices*, 47(9):41–54, September 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Mitchell:2012:SBB

[986] Neil Mitchell. Shake before building: replacing `make` with Haskell. *ACM SIGPLAN Notices*, 47(9):55–66, September 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Chitil:2012:PTL

[987] Olaf Chitil. Practical typed lazy contracts. *ACM SIGPLAN Notices*, 47(9): 67–76, September 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Oliveira:2012:FPS

[988] Bruno C.d.S. Oliveira and William R. Cook. Functional programming with structured graphs. *ACM SIGPLAN Notices*, 47(9):77–88, September 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Sheard:2012:PPC

[989] Timothy E. Sheard. Painless programming combining reduction and search: design principles for embedding decision procedures in high-level languages. *ACM SIGPLAN Notices*, 47(9):89–102, September 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Dagand:2012:TFA

[990] Pierre-Evariste Dagand and Conor McBride. Transporting functions across ornaments. *ACM SIGPLAN Notices*, 47(9):103–114, September 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Myreen:2012:PPS

[991] Magnus O. Myreen and Scott Owens. Proof-producing synthesis of ML from higher-order logic. *ACM SIGPLAN Notices*, 47(9):115–126, September 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Danielsson:2012:OSU

[992] Nils Anders Danielsson. Operational semantics using the partiality monad. *ACM SIGPLAN Notices*, 47(9):127–138, September 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Olukotun:2012:HPE

[993] Kunle Olukotun. High performance embedded domain specific languages. *ACM SIGPLAN Notices*, 47(9):139–140, September 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Severi:2012:PTS

[994] Paula G. Severi and Fer-Jan J. de Vries. Pure type systems with corecursion on streams: from finite to infinitary normalisation. *ACM SIGPLAN Notices*, 47(9):141–152, September 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Endrullis:2012:CES

[995] Jörg Endrullis, Dimitri Hendriks, and Rena Bakhshi. On the complexity of equivalence of specifications of infinite objects. *ACM SIGPLAN Notices*, 47(9):153–164, September 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Simoes:2012:AAA

[996] Hugo Simões, Pedro Vasconcelos, Mário Florido, Steffen Jost, and Kevin Hammond. Automatic amortised analysis of dynamic memory allocation for lazy functional programs. *ACM SIGPLAN Notices*, 47(9):165–176, September 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Earl:2012:IPA

[997] Christopher Earl, Ilya Sergey, Matthew Might, and David Van Horn. Introspective pushdown analysis of higher-order programs. *ACM SIGPLAN Notices*, 47(9):177–188, September 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Launchbury:2012:ELT

[998] John Launchbury, Iavor S. Diatchki, Thomas DuBuisson, and Andy Adams-Moran. Efficient lookup-table protocol in secure multiparty computation. *ACM SIGPLAN Notices*, 47(9):189–200, September 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Stefan:2012:ACT

[999] Deian Stefan, Alejandro Russo, Pablo Buiras, Amit Levy, John C. Mitchell, and David Maziéres. Addressing covert termination and timing channels in concurrent information flow systems. *ACM SIGPLAN Notices*, 47(9):201–214, September 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

zuSiederdissen:2012:SAC

[1000] Christian Höner zu Siederdissen. Sneaking around concatMap: efficient combinators for dynamic programming. *ACM SIGPLAN Notices*, 47(9): 215–226, September 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Daniels:2012:ERH

[1001] Noah M. Daniels, Andrew Gallant, and Norman Ramsey. Experience report: Haskell in computational biology. *ACM SIGPLAN Notices*, 47(9):227–234, September 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Foltzer:2012:MSP

[1002] Adam Foltzer, Abhishek Kulkarni, Rebecca Swords, Sajith Sasidharan, Eric

Jiang, and Ryan Newton. A meta-scheduler for the par-monad: composable scheduling for the heterogeneous cloud. *ACM SIGPLAN Notices*, 47(9):235–246, September 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Bergstrom:2012:NDP

[1003] Lars Bergstrom and John Reppy. Nested data-parallelism on the GPU. *ACM SIGPLAN Notices*, 47(9):247–258, September 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Lippmeier:2012:WEH

[1004] Ben Lippmeier, Manuel M. T. Chakravarty, Gabriele Keller, Roman Leshchinskiy, and Simon Peyton Jones. Work efficient higher-order vectorisation. *ACM SIGPLAN Notices*, 47(9): 259–270, September 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Sewell:2012:TJ

[1005] Peter Sewell. Tales from the jungle. *ACM SIGPLAN Notices*, 47(9):271–272, September 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Wadler:2012:PS

[1006] Philip Wadler. Propositions as sessions. *ACM SIGPLAN Notices*, 47(9):273–286, September 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Henry:2012:TUM

[1007] Grégoire Henry, Michel Mauny, Emmanuel Chailloux, and Pascal Manoury. Typing unmarshalling without marshalling types. *ACM SIGPLAN Notices*, 47(9):287–298, September 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Jones:2012:DD

[1008] Will Jones, Tony Field, and Tristan Allwood. Deconstraining DSLs. *ACM SIGPLAN Notices*, 47(9):299–310, September 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Mainland:2012:EHM

[1009] Geoffrey Mainland. Explicitly heterogeneous metaprogramming with MetaHaskell. *ACM SIGPLAN Notices*, 47 (9):311–322, September 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Axelsson:2012:GAS

[1010] Emil Axelsson. A generic abstract syntax model for embedded languages. *ACM SIGPLAN Notices*, 47(9):323–334, September 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Pike:2012:ERD

[1011] Lee Pike, Nis Wegmann, Sebastian Niller, and Alwyn Goodloe. Experience report: a do-it-yourself high-assurance compiler. *ACM SIGPLAN Notices*, 47 (9):335–340, September 2012. CODEN SINODQ. ISSN 0362-1340 (print),

1523-2867 (print), 1558-1160 (electronic).

Vytiniotis:2012:EPD

[1012] Dimitrios Vytiniotis, Simon Peyton Jones, and José Pedro Magalhães. Equality proofs and deferred type errors: a compiler pearl. *ACM SIGPLAN Notices*, 47(9):341–352, September 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Neatherway:2012:TBA

[1013] Robin P. Neatherway, Steven J. Ramsay, and Chih-Hao Luke Ong. A traversal-based algorithm for higher-order model checking. *ACM SIGPLAN Notices*, 47(9):353–364, September 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Perera:2012:FPE

[1014] Roly Perera, Umut A. Acar, James Cheney, and Paul Blain Levy. Functional programs that explain their work. *ACM SIGPLAN Notices*, 47(9):365–376, September 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Suenaga:2012:TBS

[1015] Kohei Suenaga, Ryota Fukuda, and Atsushi Igarashi. Type-based safe resource deallocation for shared-memory concurrency. *ACM SIGPLAN Notices*, 47(10):1–20, October 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Gordon:2012:URI

[1016] Colin S. Gordon, Matthew J. Parkinson, Jared Parsons, Aleks Bromfield, and Joe Duffy. Uniqueness and reference immutability for safe parallelism. *ACM SIGPLAN Notices*, 47(10):21–40, October 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Sreeram:2012:SCD

[1017] Jaswanth Sreeram and Santosh Pande. Safe compiler-driven transaction checkpointing and recovery. *ACM SIGPLAN Notices*, 47(10):41–56, October 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Muller:2012:TPS

[1018] Stefan Muller and Stephen Chong. Towards a practical secure concurrent language. *ACM SIGPLAN Notices*, 47 (10):57–74, October 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Parizek:2012:PAJ

[1019] Pavel Parízek and OndYej Lhoták. Predicate abstraction of Java programs with collections. *ACM SIGPLAN Notices*, 47(10):75–94, October 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Schiller:2012:RBW

[1020] Todd W. Schiller and Michael D. Ernst. Reducing the barriers to writing verified specifications. *ACM SIGPLAN Notices*, 47(10):95–112, October 2012.

CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Betts:2012:GVG

[1021] Adam Betts, Nathan Chong, Alastair Donaldson, Shaz Qadeer, and Paul Thomson. GPUVerify: a verifier for GPU kernels. *ACM SIGPLAN Notices*, 47(10):113–132, October 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Logozzo:2012:MVA

[1022] Francesco Logozzo and Thomas Ball. Modular and verified automatic program repair. *ACM SIGPLAN Notices*, 47(10):133–146, October 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Kulkarni:2012:MCO

[1023] Sameer Kulkarni and John Cavazos. Mitigating the compiler optimization phase-ordering problem using machine learning. *ACM SIGPLAN Notices*, 47 (10):147–162, October 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

St-Amour:2012:OCO

[1024] Vincent St-Amour, Sam Tobin-Hochstadt, and Matthias Felleisen. Optimization coaching: optimizers learn to communicate with programmers. *ACM SIGPLAN Notices*, 47(10):163–178, October 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Inoue:2012:AML

[1025] Hiroshi Inoue, Hiroshige Hayashizaki, Peng Wu, and Toshio Nakatani. Adaptive multi-level compilation in a trace-based Java JIT compiler. *ACM SIGPLAN Notices*, 47(10):179–194, October 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Castanos:2012:BPE

[1026] Jose Castanos, David Edelsohn, Kazuaki Ishizaki, Priya Nagpurkar, Toshio Nakatani, Takeshi Ogasawara, and Peng Wu. On the benefits and pitfalls of extending a statically typed language JIT compiler for dynamic scripting languages. *ACM SIGPLAN Notices*, 47(10):195–212, October 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Cousot:2012:AIFb

[1027] Patrick M. Cousot, Radhia Cousot, Francesco Logozzo, and Michael Barnett. An abstract interpretation framework for refactoring with application to extract methods with contracts. *ACM SIGPLAN Notices*, 47(10):213–232, October 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Zhang:2012:RAJ

[1028] Ying Zhang, Gang Huang, Xuanzhe Liu, Wei Zhang, Hong Mei, and Shunxiang Yang. Refactoring Android Java code for on-demand computation offloading. *ACM SIGPLAN Notices*, 47(10):233–248, October 2012. CODEN SINODQ. ISSN 0362-1340

(print), 1523-2867 (print), 1558-1160 (electronic).

Hayden:2012:KEG

[1029] Christopher M. Hayden, Edward K. Smith, Michail Denchev, Michael Hicks, and Jeffrey S. Foster. Kitsune: efficient, general-purpose dynamic software updating for C. *ACM SIGPLAN Notices*, 47(10):249–264, October 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Magill:2012:AOT

[1030] Stephen Magill, Michael Hicks, Suriya Subramanian, and Kathryn S. McKinley. Automating object transformations for dynamic software updating. *ACM SIGPLAN Notices*, 47(10):265–280, October 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Sartor:2012:EMT

[1031] Jennfer B. Sartor and Lieven Eeckhout. Exploring multi-threaded Java application performance on multicore hardware. *ACM SIGPLAN Notices*, 47(10): 281–296, October 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Kumar:2012:WSB

[1032] Vivek Kumar, Daniel Frampton, Stephen M. Blackburn, David Grove, and Olivier Tardieu. Work-stealing without the baggage. *ACM SIGPLAN Notices*, 47(10):297–314, October 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Bocq:2012:MUM

[1033] Sébastien Bocq and Koen Daenen. Molecule: using monadic and streaming I/O to compose process networks on the JVM. *ACM SIGPLAN Notices*, 47(10):315–334, October 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Kalibera:2012:BBA

[1034] Tomas Kalibera, Matthew Mole, Richard Jones, and Jan Vitek. A black-box approach to understanding concurrency in DaCapo. *ACM SIGPLAN Notices*, 47(10):335–354, October 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Jo:2012:AEL

[1035] Youngjoon Jo and Milind Kulkarni. Automatically enhancing locality for tree traversals with traversal splicing. *ACM SIGPLAN Notices*, 47(10):355–374, October 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Prountzos:2012:ESS

[1036] Dimitrios Prountzos, Roman Manevich, and Keshav Pingali. Elixir: a system for synthesizing concurrent graph programs. *ACM SIGPLAN Notices*, 47 (10):375–394, October 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Liu:2012:CED

[1037] Yanhong A. Liu, Scott D. Stoller, Bo Lin, and Michael Gorbovitski. From

clarity to efficiency for distributed algorithms. *ACM SIGPLAN Notices*, 47 (10):395–410, October 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Leino:2012:PEJ

[1038] K. Rustan M. Leino and Aleksandar Milicevic. Program extrapolation with Jennisys. *ACM SIGPLAN Notices*, 47(10):411–430, October 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Kling:2012:BDI

[1039] Michael Kling, Sasa Misailovic, Michael Carbin, and Martin Rinard. Bolt: on-demand infinite loop escape in unmodified binaries. *ACM SIGPLAN Notices*, 47(10):431–450, October 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Huang:2012:LSC

[1040] Jeff Huang and Charles Zhang. LEAN: simplifying concurrency bug reproduction via replay-supported execution reduction. *ACM SIGPLAN Notices*, 47 (10):451–466, October 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Effinger-Dean:2012:IIF

[1041] Laura Effinger-Dean, Brandon Lucia, Luis Ceze, Dan Grossman, and Hans-J. Boehm. IFRit: interference-free regions for dynamic data-race detection. *ACM SIGPLAN Notices*, 47(10): 467–484, October 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Yu:2012:MCD

[1042] Jie Yu, Satish Narayanasamy, Cristiano Pereira, and Gilles Pokam. Maple: a coverage-driven testing tool for multithreaded programs. *ACM SIGPLAN Notices*, 47(10):485–502, October 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Dubrau:2012:TM

[1043] Anton Willy Dubrau and Laurie Jane Hendren. Taming MATLAB. *ACM SIGPLAN Notices*, 47(10):503–522, October 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Siddiqui:2012:SSE

[1044] Junaid Haroon Siddiqui and Sarfraz Khurshid. Scaling symbolic execution using ranged analysis. *ACM SIGPLAN Notices*, 47(10):523–536, October 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Tobin-Hochstadt:2012:HOS

[1045] Sam Tobin-Hochstadt and David Van Horno. Higher-order symbolic execution via contracts. *ACM SIGPLAN Notices*, 47(10):537–554, October 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Rosu:2012:CRU

[1046] Grigore Rosu and Andrei Stefanescu. Checking reachability using matching

logic. *ACM SIGPLAN Notices*, 47(10): 555–574, October 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Zhao:2012:HCP

[1047] Haiping Zhao, Iain Proctor, Minghui Yang, Xin Qi, Mark Williams, Qi Gao, Guilherme Ottoni, Andrew Paroski, Scott MacVicar, Jason Evans, and Stephen Tu. The HipHop compiler for PHP. *ACM SIGPLAN Notices*, 47(10): 575–586, October 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Chugh:2012:DTJ

[1048] Ravi Chugh, David Herman, and Ranjit Jhala. Dependent types for JavaScript. *ACM SIGPLAN Notices*, 47(10):587–606, October 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Meawad:2012:EBS

[1049] Fadi Meawad, Gregor Richards, Floréal Morandat, and Jan Vitek. Eval begone!: semi-automated removal of `eval` from JavaScript programs. *ACM SIGPLAN Notices*, 47(10):607–620, October 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Kang:2012:FSJ

[1050] Seonghoon Kang and Sukyoung Ryu. Formal specification of a JavaScript module system. *ACM SIGPLAN Notices*, 47(10):621–638, October 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Barowy:2012:API

[1051] Daniel W. Barowy, Charlie Curtsinger, Emery D. Berger, and Andrew McGregor. AutoMan: a platform for integrating human-based and digital computation. *ACM SIGPLAN Notices*, 47(10): 639–654, October 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Datta:2012:TVW

[1052] Subhajit Datta, Renuka Sindhgatta, and Bikram Sengupta. Talk versus work: characteristics of developer collaboration on the Jazz platform. *ACM SIGPLAN Notices*, 47(10):655–668, October 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Muulu:2012:SAI

[1053] Kivanç Muûlu, Yuriy Brun, Reid Holmes, Michael D. Ernst, and David Notkin. Speculative analysis of integrated development environment recommendations. *ACM SIGPLAN Notices*, 47(10):669–682, October 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Mayer:2012:ESI

[1054] Clemens Mayer, Stefan Hanenberg, Romain Robbes, Éric Tanter, and Andreas Stefik. An empirical study of the influence of static type systems on the usability of undocumented software. *ACM SIGPLAN Notices*, 47(10): 683–702, October 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Tseng:2012:SDT

[1055] Hung-Wei Tseng and Dean Michael Tullsen. Software data-triggered threads. *ACM SIGPLAN Notices*, 47 (10):703–716, October 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Anderson:2012:ECP

[1056] Zachary Anderson. Efficiently combining parallel software using fine-grained, language-level, hierarchical resource management policies. *ACM SIGPLAN Notices*, 47(10):717–736, October 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Huang:2012:EPS

[1057] Jeff Huang and Charles Zhang. Execution privatization for scheduler-oblivious concurrent programs. *ACM SIGPLAN Notices*, 47(10):737–752, October 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Imam:2012:ITP

[1058] Shams M. Imam and Vivek Sarkar. Integrating task parallelism with actors. *ACM SIGPLAN Notices*, 47(10): 753–772, October 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Kastner:2012:VAM

[1059] Christian Kästner, Klaus Ostermann, and Sebastian Erdweg. A variability-aware module system. *ACM SIGPLAN Notices*, 47(10):773–792, October 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Takikawa:2012:GTF

[1060] Asumu Takikawa, T. Stephen Strickland, Christos Dimoulas, Sam Tobin-Hochstadt, and Matthias Felleisen. Gradual typing for first-class classes. *ACM SIGPLAN Notices*, 47(10):793–810, October 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Tardieu:2012:CK

[1061] Olivier Tardieu, Nathaniel Nystrom, Igor Peshansky, and Vijay Saraswat. Constrained kinds. *ACM SIGPLAN Notices*, 47(10):811–830, October 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Cohen:2012:ET

[1062] Michael Cohen, Haitao Steve Zhu, Emgin Ezgi Senem, and Yu David Liu. Energy types. *ACM SIGPLAN Notices*, 47(10):831–850, October 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Wu:2012:EIS

[1063] Bo Wu, Zhijia Zhao, Xipeng Shen, Yunlian Jiang, Yaoqing Gao, and Raul Silvera. Exploiting inter-sequence correlations for program behavior prediction. *ACM SIGPLAN Notices*, 47(10): 851–866, October 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Ausiello:2012:KCC

[1064] Giorgio Ausiello, Camil Demetrescu, Irene Finocchi, and Donatella Firmani. k-calling context profiling. *ACM SIGPLAN Notices*, 47(10):867–878, October 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Huang:2012:RRC

[1065] Wei Huang, Ana Milanova, Werner Dietl, and Michael D. Ernst. Reim & ReImInfer: checking and inference of reference immutability and method purity. *ACM SIGPLAN Notices*, 47(10): 879–896, October 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Bao:2012:WBS

[1066] Tao Bao, Yunhui Zheng, and Xiangyu Zhang. White box sampling in uncertain data processing enabled by program analysis. *ACM SIGPLAN Notices*, 47(10):897–914, October 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Lucas:2012:DPM

[1067] Charles Lucas, Sebastian Elbaum, and David S. Rosenblum. Detecting problematic message sequences and frequencies in distributed systems. *ACM SIGPLAN Notices*, 47(10):915–926, October 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Gu:2012:RDK

[1068] Zhongxian Gu, Earl T. Barr, Drew Schleck, and Zhendong Su. Reusing debugging knowledge via trace-based bug search. *ACM SIGPLAN Notices*, 47(10):927–942, October 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Strickland:2012:CIR

[1069] T. Stephen Strickland, Sam Tobin-Hochstadt, Robert Bruce Findler, and Matthew Flatt. Chaperones and impersonators: run-time support for reasonable interposition. *ACM SIGPLAN Notices*, 47(10):943–962, October 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Solodkyy:2012:OET

[1070] Yuriy Solodkyy, Gabriel Dos Reis, and Bjarne Stroustrup. Open and efficient type switch for C++. *ACM SIGPLAN Notices*, 47(10):963–982, October 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Tamayo:2012:UBD

[1071] Juan M. Tamayo, Alex Aiken, Nathan Bronson, and Mooly Sagiv. Understanding the behavior of database operations under program control. *ACM SIGPLAN Notices*, 47(10):983–996, October 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Mishne:2012:TBS

[1072] Alon Mishne, Sharon Shoham, and Eran Yahav. Typestate-based semantic code search over partial programs. *ACM SIGPLAN Notices*, 47(10):997–1016, October 2012. CODEN SIN-

ODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Xu:2012:FRD

[1073] Guoqing Xu. Finding reusable data structures. *ACM SIGPLAN Notices*, 47(10):1017–1034, October 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

OCallahan:2012:WYW

[1074] Robert O'Callahan. Why is your Web browser using so much memory? *ACM SIGPLAN Notices*, 47(11):1–2, November 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). ISMM '12 conference proceedings.

Zhou:2012:MMM

[1075] Jin Zhou and Brian Demsky. Memory management for many-core processors with software configurable locality policies. *ACM SIGPLAN Notices*, 47(11): 3–14, November 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). ISMM '12 conference proceedings.

Lyberis:2012:MMA

[1076] Spyros Lyberis, Polyvios Pratikakis, Dimitrios S. Nikolopoulos, Martin Schulz, Todd Gamblin, and Bronis R. de Supinski. The Myrmics memory allocator: hierarchical, message-passing allocation for global address spaces. *ACM SIGPLAN Notices*, 47(11):15–24, November 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). ISMM '12 conference proceedings.

Maas:2012:GOO

[1077] Martin Maas, Philip Reames, Jeffrey Morlan, Krste Asanović, Anthony D. Joseph, and John Kubiatowicz. GPUs as an opportunity for offloading garbage collection. *ACM SIGPLAN Notices*, 47(11):25–36, November 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). ISMM '12 conference proceedings.

Yang:2012:BRF

[1078] Xi Yang, Stephen M. Blackburn, Daniel Frampton, and Antony L. Hosking. Barriers reconsidered, friendlier still! *ACM SIGPLAN Notices*, 47(11): 37–48, November 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). ISMM '12 conference proceedings.

Sivaramakrishnan:2012:ERB

[1079] KC Sivaramakrishnan, Lukasz Ziarek, and Suresh Jagannathan. Eliminating read barriers through procrastination and cleanliness. *ACM SIGPLAN Notices*, 47(11):49–60, November 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). ISMM '12 conference proceedings.

Iyengar:2012:SCP

[1080] Balaji Iyengar, Edward Gehringer, Michael Wolf, and Karthikeyan Manivannan. Scalable concurrent and parallel mark. *ACM SIGPLAN Notices*, 47(11):61–72, November 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). ISMM '12 conference proceedings.

Shahriyar:2012:CGR

[1081] Rifat Shahriyar, Stephen M. Blackburn, and Daniel Frampton. Down for the count? Getting reference counting back in the ring. *ACM SIGPLAN Notices*, 47(11):73–84, November 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). ISMM '12 conference proceedings.

Iyengar:2012:CWF

[1082] Balaji Iyengar, Gil Tene, Michael Wolf, and Edward Gehringer. The Collie: a wait-free compacting collector. *ACM SIGPLAN Notices*, 47(11):85–96, November 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). ISMM '12 conference proceedings.

Sewe:2012:NSI

[1083] Andreas Sewe, Mira Mezini, Aibek Sarimbekov, Danilo Ansaloni, Walter Binder, Nathan Ricci, and Samuel Z. Guyer. `New Scala() instanceof` Java: a comparison of the memory behaviour of Java and Scala programs. *ACM SIGPLAN Notices*, 47(11):97–108, November 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). ISMM '12 conference proceedings.

Gu:2012:GTC

[1084] Xiaoming Gu and Chen Ding. A generalized theory of collaborative caching. *ACM SIGPLAN Notices*, 47(11):109–120, November 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). ISMM '12 conference proceedings.

Nasre:2012:ESC

[1085] Rupesh Nasre. Exploiting the structure of the constraint graph for efficient points-to analysis. *ACM SIGPLAN Notices*, 47(11):121–132, November 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). ISMM '12 conference proceedings.

Inoue:2012:ISC

[1086] Hiroshi Inoue and Toshio Nakatani. Identifying the sources of cache misses in Java programs without relying on hardware counters. *ACM SIGPLAN Notices*, 47(11):133–142, November 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). ISMM '12 conference proceedings.

Farmer:2012:HMP

[1087] Andrew Farmer, Andy Gill, Ed Komp, and Neil Sculthorpe. The HERMIT in the machine: a plugin for the interactive transformation of GHC core language programs. *ACM SIGPLAN Notices*, 47(12):1–12, December 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). Haskell '12 conference proceedings.

Adams:2012:TYB

[1088] Michael D. Adams and Thomas M. DuBuisson. Template your boilerplate: using Template Haskell for efficient generic programming. *ACM SIGPLAN Notices*, 47(12):13–24, December 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). Haskell '12 conference proceedings.

Lippmeier:2012:GPA

[1089] Ben Lippmeier, Manuel Chakravarty, Gabriele Keller, and Simon Peyton Jones. Guiding parallel array fusion with indexed types. *ACM SIGPLAN Notices*, 47(12):25–36, December 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). Haskell '12 conference proceedings.

Keller:2012:VA

[1090] Gabriele Keller, Manuel M. T. Chakravarty, Roman Leshchinskiy, Ben Lippmeier, and Simon Peyton Jones. Vectorisation avoidance. *ACM SIGPLAN Notices*, 47(12):37–48, December 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). Haskell '12 conference proceedings.

Jeuring:2012:TTC

[1091] Johan Jeuring, Patrik Jansson, and Cláudio Amaral. Testing type class laws. *ACM SIGPLAN Notices*, 47(12): 49–60, December 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). Haskell '12 conference proceedings.

Duregaard:2012:FFE

[1092] Jonas Duregård, Patrik Jansson, and Meng Wang. Feat: functional enumeration of algebraic types. *ACM SIGPLAN Notices*, 47(12):61–72, December 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). Haskell '12 conference proceedings.

Claessen:2012:SSF

[1093] Koen Claessen. Shrinking and showing functions: (functional pearl). *ACM SIGPLAN Notices*, 47(12):73–80, December 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). Haskell '12 conference proceedings.

Allen:2012:SDR

[1094] Wyatt Allen and Martin Erwig. Surveyor: a DSEL for representing and analyzing strongly typed surveys. *ACM SIGPLAN Notices*, 47(12):81–90, December 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). Haskell '12 conference proceedings.

Winograd-Cort:2012:WIE

[1095] Daniel Winograd-Cort and Paul Hudak. Wormholes: introducing effects to FRP. *ACM SIGPLAN Notices*, 47(12): 91–104, December 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). Haskell '12 conference proceedings.

Yorgey:2012:MTV

[1096] Brent A. Yorgey. Monoids: theme and variations (functional pearl). *ACM SIGPLAN Notices*, 47(12):105–116, December 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). Haskell '12 conference proceedings.

Eisenberg:2012:DTP

[1097] Richard A. Eisenberg and Stephanie Weirich. Dependently typed programming with singletons. *ACM SIGPLAN Notices*, 47(12):117–130, December 2012. CODEN SINODQ. ISSN

0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). Haskell '12 conference proceedings.

Swierstra:2012:XCE

[1098] Wouter Swierstra. `xmonad` in Coq (experience report): programming a window manager in a proof assistant. *ACM SIGPLAN Notices*, 47(12):131–136, December 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). Haskell '12 conference proceedings.

Terei:2012:SH

[1099] David Terei, Simon Marlow, Simon Peyton Jones, and David Mazières. Safe Haskell. *ACM SIGPLAN Notices*, 47(12):137–148, December 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). Haskell '12 conference proceedings.

Erdweg:2012:LSL

[1100] Sebastian Erdweg, Felix Rieger, Tillmann Rendel, and Klaus Ostermann. Layout-sensitive language extensibility with SugarHaskell. *ACM SIGPLAN Notices*, 47(12):149–160, December 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). Haskell '12 conference proceedings.

Cousot:2013:EMO

[1101] Radhia Cousot. Engineering mathematics: the odd order theorem proof. *ACM SIGPLAN Notices*, 48(1):1–2, January 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Losch:2013:FAN

[1102] Steffen Lösch and Andrew M. Pitts. Full abstraction for nominal Scott domains. *ACM SIGPLAN Notices*, 48 (1):3–14, January 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Tate:2013:SSP

[1103] Ross Tate. The sequential semantics of producer effect systems. *ACM SIGPLAN Notices*, 48(1):15–26, January 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Abel:2013:CPI

[1104] Andreas Abel, Brigitte Pientka, David Thibodeau, and Anton Setzer. Copatterns: programming infinite structures by observations. *ACM SIGPLAN Notices*, 48(1):27–38, January 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Blelloch:2013:CEF

[1105] Guy E. Blelloch and Robert Harber. Cache and I/O efficient functional algorithms. *ACM SIGPLAN Notices*, 48 (1):39–50, January 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Ben-Amram:2013:LRP

[1106] Amir M. Ben-Amram and Samir Genaim. On the linear ranking problem for integer linear-constraint loops. *ACM SIGPLAN Notices*, 48(1):51–62, January 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Mayr:2013:AAM

[1107] Richard Mayr and Lorenzo Clemente. Advanced automata minimization. *ACM SIGPLAN Notices*, 48(1):63–74, January 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Unno:2013:ARC

[1108] Hiroshi Unno, Tachio Terauchi, and Naoki Kobayashi. Automating relatively complete verification of higher-order functional programs. *ACM SIGPLAN Notices*, 48(1):75–86, January 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Atkey:2013:AIA

[1109] Robert Atkey, Patricia Johann, and Andrew Kennedy. Abstraction and invariance for algebraically indexed types. *ACM SIGPLAN Notices*, 48(1): 87–100, January 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Benzaken:2013:SDS

[1110] Véronique Benzaken, Giuseppe Castagna, Kim Nguyen, and Jérôme Siméon. Static and dynamic semantics of NoSQL languages. *ACM SIGPLAN Notices*, 48(1):101–114, January 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Cerny:2013:QAR

[1111] Pavol Cerny, Thomas A. Henzinger, and Arjun Radhakrishna. Quantitative abstraction refinement. *ACM SIGPLAN Notices*, 48(1):115–128, January 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Farzan:2013:IDF

[1112] Azadeh Farzan, Zachary Kincaid, and Andreas Podelski. Inductive data flow graphs. *ACM SIGPLAN Notices*, 48(1):129–142, January 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

DSilva:2013:ACD

[1113] Vijay D'Silva, Leopold Haller, and Daniel Kroening. Abstract conflict driven learning. *ACM SIGPLAN Notices*, 48(1):143–154, January 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Goyet:2013:LLB

[1114] Alexis Goyet. The Lambda Lambda-Bar calculus: a dual calculus for unconstrained strategies. *ACM SIGPLAN Notices*, 48(1):155–166, January 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

lago:2013:GT

[1115] Ugo Dal lago and Barbara Petit. The geometry of types. *ACM SIGPLAN Notices*, 48(1):167–178, January 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Staton:2013:UPI

[1116] Sam Staton and Paul Blain Levy. Universal properties of impure programming languages. *ACM SIGPLAN No-*

tices, 48(1):179–192, January 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Hur:2013:PPC

[1117] Chung-Kil Hur, Georg Neis, Derek Dreyer, and Viktor Vafeiadis. The power of parameterization in coinductive proof. *ACM SIGPLAN Notices*, 48(1):193–206, January 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Delaware:2013:MTC

[1118] Benjamin Delaware, Bruno C. d. S. Oliveira, and Tom Schrijvers. Meta-theory à la carte. *ACM SIGPLAN Notices*, 48(1): 207–218, January 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Park:2013:TPB

[1119] Jonghyun Park, Jeongbong Seo, and Sungwoo Park. A theorem prover for Boolean BI. *ACM SIGPLAN Notices*, 48(1):219–232, January 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Krishnamurthi:2013:PPL

[1120] Shriram Krishnamurthi. From principles to programming languages (and back). *ACM SIGPLAN Notices*, 48(1): 233–234, January 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Batty:2013:LAC

[1121] Mark Batty, Mike Dodds, and Alexey Gotsman. Library abstraction for C/C++ concurrency. *ACM SIGPLAN Notices*, 48(1):235–248, January 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Ramalingam:2013:FTI

[1122] Ganesan Ramalingam and Kapil Vaswani. Fault tolerance via idempotence. *ACM SIGPLAN Notices*, 48(1): 249–262, January 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Carbone:2013:DFD

[1123] Marco Carbone and Fabrizio Montesi. Deadlock-freedom-by-design: multiparty asynchronous global programming. *ACM SIGPLAN Notices*, 48(1): 263–274, January 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Caires:2013:TDB

[1124] Luís Caires and João C. Seco. The type discipline of behavioral separation. *ACM SIGPLAN Notices*, 48(1): 275–286, January 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Dinsdale-Young:2013:VCR

[1125] Thomas Dinsdale-Young, Lars Birkedal, Philippa Gardner, Matthew Parkinson, and Hongseok Yang. Views: compositional reasoning for concurrent programs. *ACM SIGPLAN Notices*, 48(1): 287–300, January 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Jensen:2013:HLS

[1126] Jonas B. Jensen, Nick Benton, and Andrew Kennedy. High-level separation logic for low-level code. *ACM SIGPLAN Notices*, 48(1):301–314, January 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Myers:2013:HLC

[1127] Andrew C. Myers. How languages can save distributed computing. *ACM SIGPLAN Notices*, 48(1):315–316, January 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Henzinger:2013:QRC

[1128] Thomas A. Henzinger, Christoph M. Kirsch, Hannes Payer, Ali Sezgin, and Ana Sokolova. Quantitative relaxation of concurrent data structures. *ACM SIGPLAN Notices*, 48(1):317–328, January 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Demange:2013:PBB

[1129] Delphine Demange, Vincent Laporte, Lei Zhao, Suresh Jagannathan, David Pichardie, and Jan Vitek. Plan B: a buffered memory model for Java. *ACM SIGPLAN Notices*, 48(1):329–342, January 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Turon:2013:LRF

[1130] Aaron J. Turon, Jacob Thamsborg, Amal Ahmed, Lars Birkedal, and Derek Dreyer. Logical relations for fine-grained concurrency. *ACM SIGPLAN Notices*, 48(1):343–356, January 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Gaboardi:2013:LDT

[1131] Marco Gaboardi, Andreas Haeberlen, Justin Hsu, Arjun Narayan, and Benjamin C. Pierce. Linear dependent types for differential privacy. *ACM SIGPLAN Notices*, 48(1):357–370, January 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Fournet:2013:FAC

[1132] Cedric Fournet, Nikhil Swamy, Juan Chen, Pierre-Evariste Dagand, Pierre-Yves Strub, and Benjamin Livshits. Fully abstract compilation to JavaScript. *ACM SIGPLAN Notices*, 48(1):371–384, January 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Livshits:2013:TFA

[1133] Benjamin Livshits and Stephen Chong. Towards fully automatic placement of security sanitizers and declassifiers. *ACM SIGPLAN Notices*, 48(1):385–398, January 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Goodman:2013:PPP

[1134] Noah D. Goodman. The principles and practice of probabilistic programming. *ACM SIGPLAN Notices*, 48(1):399–402, January 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Gordon:2013:MLP

[1135] Andrew D. Gordon, Mihhail Aizatulin, Johannes Borgstrom, Guillaume Claret, Thore Graepel, Aditya V. Nori, Sriram K. Rajamani, and Claudio Russo. A model-learner pattern for Bayesian reasoning. *ACM SIGPLAN Notices*, 48(1):403–416, January 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Suenaga:2013:HPS

[1136] Kohei Suenaga, Hiroyoshi Sekine, and Ichiro Hasuo. Hyperstream processing systems: nonstandard modeling of continuous-time signals. *ACM SIGPLAN Notices*, 48(1):417–430, January 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Vytiniotis:2013:HHL

[1137] Dimitrios Vytiniotis, Simon Peyton Jones, Koen Claessen, and Dan Rosén. HALO: Haskell to logic through denotational semantics. *ACM SIGPLAN Notices*, 48(1):431–442, January 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Botincan:2013:SSL

[1138] Matko Botincan and Domagoj Babić. Sigma*: symbolic learning of input-output specifications. *ACM SIGPLAN Notices*, 48(1):443–456, January 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Bonchi:2013:CNE

[1139] Filippo Bonchi and Damien Pous. Checking NFA equivalence with bisimulations up to congruence. *ACM SIGPLAN Notices*, 48(1):457–468, January 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Koksal:2013:SBM

[1140] Ali Sinan Koksal, Yewen Pu, Saurabh Srivastava, Rastislav Bodik, Jasmin Fisher, and Nir Piterman. Synthesis of biological models from mutation experiments. *ACM SIGPLAN Notices*, 48(1):469–482, January 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Upadrasta:2013:SPS

[1141] Ramakrishna Upadrasta and Albert Cohen. Sub-polyhedral scheduling using (unit-)two-variable-per-inequality polyhedra. *ACM SIGPLAN Notices*, 48(1):483–496, January 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Rompf:2013:ODS

[1142] Tiark Rompf, Arvind K. Sujeeth, Nada Amin, Kevin J. Brown, Vojin Jovanovic, HyoukJoong Lee, Manohar Jonnalagedda, Kunle Olukotun, and Martin Odersky. Optimizing data structures in high-level programs: new directions for extensible compilers based on staging. *ACM SIGPLAN Notices*, 48(1):497–510, January 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Adams:2013:PPI

[1143] Michael D. Adams. Principled parsing for indentation-sensitive languages: revisiting Landin's offside rule. *ACM SIGPLAN Notices*, 48(1):511–522, January 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Hobor:2013:RSD

[1144] Aquinas Hobor and Jules Villard. The ramifications of sharing in data structures. *ACM SIGPLAN Notices*, 48(1): 523–536, January 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Totla:2013:CIB

[1145] Nishant Totla and Thomas Wies. Complete instantiation-based interpolation. *ACM SIGPLAN Notices*, 48(1):537–548, January 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Barr:2013:ADF

[1146] Earl T. Barr, Thanh Vo, Vu Le, and Zhendong Su. Automatic detection of floating-point exceptions. *ACM SIGPLAN Notices*, 48(1):549–560, January 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Ley-Wild:2013:SAS

[1147] Ruy Ley-Wild and Aleksandar Nanevski. Subjective auxiliary state for coarse-grained concurrency. *ACM SIGPLAN Notices*, 48(1):561–574, January 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Miller:2013:TSG

[1148] Mark Miller. A tested semantics for getters, setters, and eval in JavaScript. *ACM SIGPLAN Notices*, 48(2):1–16, February 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Homer:2013:POG

[1149] Michael Homer, James Noble, Kim B. Bruce, Andrew P. Black, and David J. Pearce. Patterns as objects in Grace. *ACM SIGPLAN Notices*, 48(2):17–28, February 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Bloom:2013:RSP

[1150] Bard Bloom and Martin J. Hirzel. Robust scripting via patterns. *ACM SIGPLAN Notices*, 48(2):29–40, February 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Normark:2013:OOP

[1151] Kurt Nørmark, Lone Leth Thomsen, and Bent Thomsen. Object-oriented programming with gradual abstraction. *ACM SIGPLAN Notices*, 48(2): 41–52, February 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Pignotti:2013:ADP

[1152] Alessandro Pignotti, Adam Welc, and Bernd Mathiske. Adaptive data parallelism for Internet clients on heterogeneous platforms. *ACM SIGPLAN Notices*, 48(2):53–62, February 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Ardo:2013:LAO

[1153] Håkan Ardö, Carl Friedrich Bolz, and Maciej Fijałkowski. Loop-aware optimizations in PyPy's tracing JIT. *ACM SIGPLAN Notices*, 48(2):63–72, February 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Wurthinger:2013:SOA

[1154] Thomas Würthinger, Andreas Wöß, Lukas Stadler, Gilles Duboscq, Doug Simon, and Christian Wimmer. Self-optimizing AST interpreters. *ACM SIGPLAN Notices*, 48(2):73–82, February 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Wernli:2013:OFC

[1155] Erwann Wernli, Pascal Maerki, and Oscar Nierstrasz. Ownership, filters and crossing handlers: flexible ownership in dynamic languages. *ACM SIGPLAN Notices*, 48(2):83–94, February 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Lerner:2013:DCA

[1156] Benjamin S. Lerner and Dan Grossman. Detecting conflicts among declarative UI extensions. *ACM SIGPLAN Notices*, 48(2):95–106, February 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Steinert:2013:COA

[1157] Bastian Steinert, Damien Cassou, and Robert Hirschfeld. CoExist: overcoming aversion to change. *ACM SIGPLAN Notices*, 48(2):107–118, February 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Damiani:2013:FFD

[1158] Ferruccio Damiani, Luca Padovani, and Ina Schaefer. A formal foundation for dynamic delta-oriented software product lines. *ACM SIGPLAN Notices*, 48 (3):1–10, March 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Thum:2013:FBD

[1159] Thomas Thüm, Ina Schaefer, Sven Apel, and Martin Hentschel. Family-based deductive verification of software product lines. *ACM SIGPLAN Notices*, 48(3):11–20, March 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Ryssel:2013:RFM

[1160] Uwe Ryssel, Joern Ploennigs, and Klaus Kabitzsch. Reasoning of feature models from derived features. *ACM SIGPLAN Notices*, 48(3):21–30, March 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Rayside:2013:SIA

[1161] Derek Rayside, Vajihollah Montaghami, Francesca Leung, Albert Yuen, Kevin Xu, and Daniel Jackson. Synthesizing iterators from abstraction functions. *ACM SIGPLAN Notices*, 48 (3):31–40, March 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Hulette:2013:CTT

[1162] Geoffrey C. Hulette, Matthew Sottile, and Allen D. Malony. Composing typemaps in Twig. *ACM SIGPLAN Notices*, 48(3):41–49, March 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Axelsen:2013:PTD

[1163] Eyvind W. Axelsen and Stein Krogdahl. Package Templates: a definition by semantics-preserving source-to-source transformations to efficient Java code. *ACM SIGPLAN Notices*, 48 (3):50–59, March 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Spacek:2013:ISS

[1164] Petr Spacek, Christophe Dony, Chouki Tibermacine, and Luc Fabresse. An inheritance system for structural & behavioral reuse in component-based software programming. *ACM SIGPLAN Notices*, 48(3):60–69, March 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Zhang:2013:TLC

[1165] Huaxi (Yulin) Zhang, Lei Zhang, Christelle Urtado, Sylvain Vauttier, and Marianne Huchard. A three-level component model in component based software development. *ACM SIGPLAN Notices*, 48(3):70–79, March 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Freeman:2013:HLW

[1166] John Freeman, Jaakko Järvi, and Gabriel Foust. HotDrink: a library for Web user interfaces. *ACM SIGPLAN Notices*, 48(3):80–83, March 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Riche:2013:PSA

[1167] T. L. Riché, R. Gonçalves, B. Marker, and D. Batory. Pushouts in software architecture design. *ACM SIGPLAN Notices*, 48(3):84–92, March 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Bagheri:2013:PSD

[1168] Hamid Bagheri and Kevin Sullivan. Pol: specification-driven synthesis of architectural code frameworks for platform-based applications. *ACM SIGPLAN Notices*, 48(3):93–102, March 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Bauer:2013:FPA

[1169] Tim Bauer, Martin Erwig, Alan Fern, and Jervis Pinto. Faster program adaptation through reward attribution inference. *ACM SIGPLAN Notices*, 48 (3):103–111, March 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Efftinge:2013:XID

[1170] Sven Efftinge, Moritz Eysholdt, Jan Köhnlein, Sebastian Zarnekow, Robert von Massow, Wilhelm Hasselbring, and

Michael Hanus. Xbase: implementing domain-specific languages for Java. *ACM SIGPLAN Notices*, 48(3):112–121, March 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Rafkind:2013:HSE

[1171] Jon Rafkind and Matthew Flatt. Honu: syntactic extension for algebraic notation through enforestation. *ACM SIGPLAN Notices*, 48(3):122–131, March 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Walkingshaw:2013:CMI

[1172] Eric Walkingshaw and Martin Erwig. A calculus for modeling and implementing variation. *ACM SIGPLAN Notices*, 48(3):132–140, March 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Bond:2013:GDG

[1173] Michael Bond. GPUDet: a deterministic GPU architecture. *ACM SIGPLAN Notices*, 48(4):1–12, April 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Sung:2013:DEH

[1174] Hyojin Sung, Rakesh Komuravelli, and Sarita V. Adve. DeNovoND: efficient hardware support for disciplined nondeterminism. *ACM SIGPLAN Notices*, 48(4):13–26, April 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Wester:2013:PDR

[1175] Benjamin Wester, David Devecsery, Peter M. Chen, Jason Flinn, and Satish Narayanasamy. Parallelizing data race detection. *ACM SIGPLAN Notices*, 48 (4):27–38, April 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Lucia:2013:CEF

[1176] Brandon Lucia and Luis Ceze. Cooperative empirical failure avoidance for multithreaded programs. *ACM SIGPLAN Notices*, 48(4):39–50, April 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Goiri:2013:PGM

[1177] Íñigo Goiri, William Katsak, Kien Le, Thu D. Nguyen, and Ricardo Bianchini. Parasol and GreenSwitch: managing datacenters powered by renewable energy. *ACM SIGPLAN Notices*, 48(4):51–64, April 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Shen:2013:PCF

[1178] Kai Shen, Arrvindh Shriraman, Sandhya Dwarkadas, Xiao Zhang, and Zhuan Chen. Power containers: an OS facility for fine-grained power and energy management on multicore servers. *ACM SIGPLAN Notices*, 48(4):65–76, April 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Delimitrou:2013:PQA

[1179] Christina Delimitrou and Christos Kozyrakis. Paragon: QoS-aware

scheduling for heterogeneous datacenters. *ACM SIGPLAN Notices*, 48 (4):77–88, April 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Tang:2013:RRS

[1180] Lingjia Tang, Jason Mars, Wei Wang, Tanima Dey, and Mary Lou Soffa. ReQoS: reactive static/dynamic compilation for QoS in warehouse scale computers. *ACM SIGPLAN Notices*, 48 (4):89–100, April 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Arulraj:2013:PRS

[1181] Joy Arulraj, Po-Chun Chang, Guoliang Jin, and Shan Lu. Production-run software failure diagnosis via hardware performance counters. *ACM SIGPLAN Notices*, 48(4):101–112, April 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Zhang:2013:CFC

[1182] Wei Zhang, Marc de Kruijf, Ang Li, Shan Lu, and Karthikeyan Sankaralingam. ConAir: featherweight concurrency bug recovery via single-threaded idempotent execution. *ACM SIGPLAN Notices*, 48(4):113–126, April 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Viennot:2013:TMR

[1183] Nicolas Viennot, Siddharth Nair, and Jason Nieh. Transparent mutable replay for multicore debugging and patch validation. *ACM SIGPLAN Notices*, 48 (4):127–138, April 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Sahoo:2013:ULI

[1184] Swarup Kumar Sahoo, John Criswell, Chase Geigle, and Vikram Adve. Using likely invariants for automated software fault localization. *ACM SIGPLAN Notices*, 48(4):139–152, April 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Paulos:2013:REA

[1185] Eric Paulos. The rise of the expert amateur: DIY culture and the evolution of computer science. *ACM SIGPLAN Notices*, 48(4):153–154, April 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Raghavan:2013:CSH

[1186] Arun Raghavan, Laurel Emurian, Lei Shao, Marios Papaefthymiou, Kevin P. Pipe, Thomas F. Wenisch, and Milo M. K. Martin. Computational sprinting on a hardware/software testbed. *ACM SIGPLAN Notices*, 48(4):155–166, April 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Ahn:2013:DAS

[1187] Wonsun Ahn, Yuelu Duan, and Josep Torrellas. DeAliaser: alias speculation using atomic region support. *ACM SIGPLAN Notices*, 48(4):167–180, April 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Park:2013:RCH

[1188] Heekwon Park, Seungjae Baek, Jongmoo Choi, Donghee Lee, and Sam H. Noh. Regularities considered harmful: forcing randomness to memory accesses to reduce row buffer conflicts for multi-core, multi-bank systems. *ACM SIGPLAN Notices*, 48(4):181–192, April 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Honarmand:2013:CUA

[1189] Nima Honarmand, Nathan Dautenhahn, Josep Torrellas, Samuel T. King, Gilles Pokam, and Cristiano Pereira. Cyrus: unintrusive application-level record-replay for replay parallelism. *ACM SIGPLAN Notices*, 48(4):193–206, April 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

deOliveira:2013:WYS

[1190] Augusto Born de Oliveira, Sebastian Fischmeister, Amer Diwan, Matthias Hauswirth, and Peter F. Sweeney. Why you should care about quantile regression. *ACM SIGPLAN Notices*, 48(4): 207–218, April 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Curtsinger:2013:SSS

[1191] Charlie Curtsinger and Emery D. Berger. STABILIZER: statistically sound performance evaluation. *ACM SIGPLAN Notices*, 48(4):219–228, April 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Gidra:2013:SSS

[1192] Lokesh Gidra, Gaël Thomas, Julien Sopena, and Marc Shapiro. A study of the scalability of stop-the-world garbage collectors on multicores. *ACM SIGPLAN Notices*, 48(4): 229–240, April 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

McFarlin:2013:DDO

[1193] Daniel S. McFarlin, Charles Tucker, and Craig Zilles. Discerning the dominant out-of-order performance advantage: is it speculation or dynamism? *ACM SIGPLAN Notices*, 48 (4):241–252, April 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Checkoway:2013:IAW

[1194] Stephen Checkoway and Hovav Shacham. Iago attacks: why the system call API is a bad untrusted RPC interface. *ACM SIGPLAN Notices*, 48(4): 253–264, April 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Hofmann:2013:ISA

[1195] Owen S. Hofmann, Sangman Kim, Alan M. Dunn, Michael Z. Lee, and Emmett Witchel. InkTag: secure applications on an untrusted operating system. *ACM SIGPLAN Notices*, 48 (4):265–278, April 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Giuffrida:2013:SAL

[1196] Cristiano Giuffrida, Anton Kuijsten, and Andrew S. Tanenbaum. Safe and

automatic live update for operating systems. *ACM SIGPLAN Notices*, 48 (4):279–292, April 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Mai:2013:VSI

[1197] Haohui Mai, Edgar Pek, Hui Xue, Samuel Talmadge King, and Parthasarathy Madhusudan. Verifying security invariants in ExpressOS. *ACM SIGPLAN Notices*, 48(4):293–304, April 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Schkufza:2013:SS

[1198] Eric Schkufza, Rahul Sharma, and Alex Aiken. Stochastic superoptimization. *ACM SIGPLAN Notices*, 48(4): 305–316, April 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Schulte:2013:ARB

[1199] Eric Schulte, Jonathan DiLorenzo, Westley Weimer, and Stephanie Forrest. Automated repair of binary and assembly programs for cooperating embedded devices. *ACM SIGPLAN Notices*, 48(4):317–328, April 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Cui:2013:VSR

[1200] Heming Cui, Gang Hu, Jingyue Wu, and Junfeng Yang. Verifying systems rules using rule-directed symbolic execution. *ACM SIGPLAN Notices*, 48 (4):329–342, April 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Xiang:2013:HHO

[1201] Xiaoya Xiang, Chen Ding, Hao Luo, and Bin Bao. HOTL: a higher order theory of locality. *ACM SIGPLAN Notices*, 48(4):343–356, April 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Kang:2013:HPP

[1202] Hui Kang and Jennifer L. Wong. To hardware prefetch or not to prefetch?: a virtualized environment study and core binding approach. *ACM SIGPLAN Notices*, 48(4):357–368, April 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Kim:2013:DBC

[1203] Hwanju Kim, Sangwook Kim, Jinkyu Jeong, Joonwon Lee, and Seungryoul Maeng. Demand-based coordinated scheduling for SMP VMs. *ACM SIGPLAN Notices*, 48(4):369–380, April 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Dashti:2013:TMH

[1204] Mohammad Dashti, Alexandra Fedorova, Justin Funston, Fabien Gaud, Renaud Lachaize, Baptiste Lepers, Vivien Quema, and Mark Roth. Traffic management: a holistic approach to memory placement on NUMA systems. *ACM SIGPLAN Notices*, 48(4): 381–394, April 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Jog:2013:OCT

[1205] Adwait Jog, Onur Kayiran, Nachiappan Chidambaram Nachiappan, Asit K. Mishra, Mahmut T. Kandemir, Onur Mutlu, Ravishankar Iyer, and Chita R. Das. OWL: cooperative thread array aware scheduling techniques for improving GPGPU performance. *ACM SIGPLAN Notices*, 48 (4):395–406, April 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Pai:2013:IGC

[1206] Sreepathi Pai, Matthew J. Thazhuthaveetil, and R. Govindarajan. Improving GPGPU concurrency with elastic kernels. *ACM SIGPLAN Notices*, 48(4): 407–418, April 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Oh:2013:PAL

[1207] Taewook Oh, Hanjun Kim, Nick P. Johnson, Jae W. Lee, and David I. August. Practical automatic loop specialization. *ACM SIGPLAN Notices*, 48 (4):419–430, April 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Phothilimthana:2013:PPH

[1208] Phitchaya Mangpo Phothilimthana, Jason Ansel, Jonathan Ragan-Kelley, and Saman Amarasinghe. Portable performance on heterogeneous architectures. *ACM SIGPLAN Notices*, 48 (4):431–444, April 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Mittal:2013:EVE

[1209] Aashish Mittal, Dushyant Bansal, Sorav Bansal, and Varun Sethi. Efficient virtualization on embedded Power Architecture(R) platforms. *ACM SIGPLAN Notices*, 48(4):445–458, April 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Hill:2013:RDC

[1210] Mark D. Hill. Research directions for 21st Century computer systems: ASPLOS 2013 panel. *ACM SIGPLAN Notices*, 48(4):459–460, April 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Madhavapeddy:2013:ULO

[1211] Anil Madhavapeddy, Richard Mortier, Charalampos Rotsos, David Scott, Balraj Singh, Thomas Gazagnaire, Steven Smith, Steven Hand, and Jon Crowcroft. Unikernels: library operating systems for the cloud. *ACM SIGPLAN Notices*, 48(4):461–472, April 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Kadav:2013:FGF

[1212] Asim Kadav, Matthew J. Renzelmann, and Michael M. Swift. Fine-grained fault tolerance using device checkpoints. *ACM SIGPLAN Notices*, 48 (4):473–484, April 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Silberstein:2013:GIF

[1213] Mark Silberstein, Bryan Ford, Idit Keidar, and Emmett Witchel. GPUfs:

integrating a file system with GPUs. *ACM SIGPLAN Notices*, 48(4):485–498, April 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Hunt:2013:DTN

[1214] Nicholas Hunt, Tom Bergan, Luis Ceze, and Steven D. Gribble. DDOS: taming nondeterminism in distributed systems. *ACM SIGPLAN Notices*, 48(4): 499–508, April 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Wang:2013:TEH

[1215] Cheng Wang and Youfeng Wu. TSO_ATOMICITY: efficient hardware primitive for TSO-preserving region optimizations. *ACM SIGPLAN Notices*, 48(4):509–520, April 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Jafri:2013:WGI

[1216] Syed Ali Raza Jafri, Gwendolyn Voskuilen, and T. N. Vijaykumar. Wait-n-GoTM: improving HTM performance by serializing cyclic dependencies. *ACM SIGPLAN Notices*, 48 (4):521–534, April 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Qian:2013:VSP

[1217] Xuehai Qian, Josep Torrellas, Benjamin Sahelices, and Depei Qian. Volition: scalable and precise sequential consistency violation detection. *ACM SIGPLAN Notices*, 48(4):535–548, April 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Grossman:2013:HSF

[1218] J. P. Grossman, Jeffrey S. Kuskin, Joseph A. Bank, Michael Theobald, Ron O. Dror, Douglas J. Ierardi, Richard H. Larson, U. Ben Schafer, Brian Towles, Cliff Young, and David E. Shaw. Hardware support for fine-grained event-driven computation in Anton 2. *ACM SIGPLAN Notices*, 48(4):549–560, April 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Vitek:2013:SCR

[1219] Jan Vitek. SIGPLAN Chair's report. *ACM SIGPLAN Notices*, 48(4S):1–2, April 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Gibbons:2013:ASV

[1220] Jeremy Gibbons. ACM SIGPLAN Vice-Chair's report. *ACM SIGPLAN Notices*, 48(4S):3, April 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Black:2013:SSR

[1221] Andrew P. Black. SIGPLAN Secretary's report. *ACM SIGPLAN Notices*, 48(4S):4–5, April 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Lopes:2013:STR

[1222] Cristina V. Lopes. SIGPLAN Treasurer's report. *ACM SIGPLAN Notices*, 48(4S):6, April 2013. CODEN

SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Dreyer:2013:SMI

[1223] Derek Dreyer. SIGPLAN most influential paper awards. *ACM SIGPLAN Notices*, 48(4S):7–8, April 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Lawall:2013:SPA

[1224] Julia Lawall and Cristina V. Lopes. SIGPLAN Professional Activities Committee report. *ACM SIGPLAN Notices*, 48(4S):9, April 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Hind:2013:CRH

[1225] Michael Hind. CACM research highlights annual report. *ACM SIGPLAN Notices*, 48(4S):10–11, April 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Dreyer:2013:PP

[1226] Derek Dreyer, John Field, Roberto Giacobazzi, Michael Hicks, Suresh Jagannathan, Mooly Sagiv, Peter Sewell, and Phil Wadler. Principles of POPL. *ACM SIGPLAN Notices*, 48(4S):12–16, April 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Krishnamurthi:2013:AES

[1227] Shriram Krishnamurthi. Artifact evaluation for software conferences. *ACM SIGPLAN Notices*, 48(4S):17–21, April 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Flanagan:2013:PES

[1228] Cormac Flanagan, K. Rustan M. Leino, Mark Lillibridge, Greg Nelson, James B. Saxe, and Raymie Stata. PLDI 2002: Extended static checking for Java. *ACM SIGPLAN Notices*, 48 (4S):22–33, April 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Findler:2013:ICH

[1229] Robert Bruce Findler and Matthias Felleisen. ICFP 2002: Contracts for higher-order functions. *ACM SIGPLAN Notices*, 48(4S):34–45, April 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Berger:2013:ORC

[1230] Emery D. Berger, Benjamin G. Zorn, and Kathryn S. McKinley. OOPSLA 2002: Reconsidering custom memory allocation. *ACM SIGPLAN Notices*, 48 (4S):46–57, April 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Bacon:2013:PRT

[1231] David F. Bacon, Perry Cheng, and V. T. Rajan. POPL 2003: a real-time garbage collector with low overhead and consistent utilization. *ACM SIGPLAN Notices*, 48(4S):58–71, April 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Wu:2013:HSC

[1232] Youfeng Wu. HW/SW co-designed acceleration of dynamic languages. *ACM SIGPLAN Notices*, 48(5):1–2, May 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Khudia:2013:LCC

[1233] Daya Shanker Khudia and Scott Mahlke. Low cost control flow protection using abstract control signatures. *ACM SIGPLAN Notices*, 48(5):3–12, May 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Chen:2013:BEF

[1234] Hao Chen and Chengmo Yang. Boosting efficiency of fault detection and recovery through application-specific comparison and checkpointing. *ACM SIGPLAN Notices*, 48(5):13–20, May 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Stilkerich:2013:JSE

[1235] Isabella Stilkerich, Michael Strotz, Christoph Erhardt, Martin Hoffmann, Daniel Lohmann, Fabian Scheler, and Wolfgang Schröder-Preikschat. A JVM for soft-error-prone embedded systems. *ACM SIGPLAN Notices*, 48(5):21–32, May 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Finlayson:2013:IPE

[1236] Ian Finlayson, Brandon Davis, Peter Gavin, Gang-Ryung Uh, David Whalley, Magnus Själander, and Gary Tyson. Improving processor efficiency by statically pipelining instructions. *ACM SIGPLAN Notices*, 48(5):33–44, May 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Porpodas:2013:LLA

[1237] Vasileios Porpodas and Marcelo Cintra. LUCAS: latency-adaptive unified cluster assignment and instruction scheduling. *ACM SIGPLAN Notices*, 48(5):45–54, May 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Jang:2013:PSP

[1238] Hakbeom Jang, Channoh Kim, and Jae W. Lee. Practical speculative parallelization of variable-length decompression algorithms. *ACM SIGPLAN Notices*, 48(5):55–64, May 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Chattopadhyay:2013:PPS

[1239] Sudipta Chattopadhyay, Lee Kee Chong, and Abhik Roychoudhury. Program performance spectrum. *ACM SIGPLAN Notices*, 48(5):65–76, May 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Moreno:2013:NIP

[1240] Carlos Moreno, Sebastian Fischmeister, and M. Anwar Hasan. Non-intrusive program tracing and debugging of deployed embedded systems through side-channel analysis. *ACM SIGPLAN Notices*, 48(5):77–88, May

2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Beemster:2013:RCD

[1241] Marcel Beemster. The role of C in the dark ages of multi-core. *ACM SIGPLAN Notices*, 48(5):89–90, May 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Wang:2013:FHF

[1242] Tianzheng Wang, Duo Liu, Yi Wang, and Zili Shao. FTL 2: a hybrid *f*lash *t*ranslation *l*ayer with logging for write reduction in flash memory. *ACM SIGPLAN Notices*, 48(5):91–100, May 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Li:2013:CDW

[1243] Qingan Li, Lei Jiang, Youtao Zhang, Yanxiang He, and Chun Jason Xue. Compiler directed write-mode selection for high performance low power volatile PCM. *ACM SIGPLAN Notices*, 48 (5):101–110, May 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Guan:2013:BBL

[1244] Yong Guan, Guohui Wang, Yi Wang, Renhai Chen, and Zili Shao. BLog: block-level log-block management for NAND flash memory storage systems. *ACM SIGPLAN Notices*, 48(5): 111–120, May 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Mehiaoui:2013:TSO

[1245] Asma Mehiaoui, Ernest Wozniak, Sara Tucci-Piergiovanni, Chokri Mraidha, Marco Di Natale, Haibo Zeng, Jean-Philippe Babau, Laurent Lemarchand, and Sébastien Gerard. A two-step optimization technique for functions placement, partitioning, and priority assignment in distributed systems. *ACM SIGPLAN Notices*, 48(5):121–132, May 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Bouakaz:2013:BME

[1246] Adnan Bouakaz and Jean-Pierre Talpin. Buffer minimization in earliest-deadline first scheduling of dataflow graphs. *ACM SIGPLAN Notices*, 48 (5):133–142, May 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Geuns:2013:ADM

[1247] Stefan J. Geuns, Joost P. H. M. Hausmans, and Marco J. G. Bekooij. Automatic dataflow model extraction from modal real-time stream processing applications. *ACM SIGPLAN Notices*, 48 (5):143–152, May 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Wang:2013:PMO

[1248] Cheng Wang, Sunita Chandrasekaran, Peng Sun, Barbara Chapman, and Jim Holt. Portable mapping of openMP to multicore embedded systems using MCA APIs. *ACM SIGPLAN Notices*, 48(5):153–162, May 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Huber:2013:CWA

[1249] Benedikt Huber, Daniel Prokesch, and Peter Puschner. Combined WCET analysis of bitcode and machine code using control-flow relation graphs. *ACM SIGPLAN Notices*, 48 (5):163–172, May 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Smaragdakis:2013:LYF

[1250] Yannis Smaragdakis. Look up!: your future is in the cloud. *ACM SIGPLAN Notices*, 48(6):1–2, June 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Cheung:2013:ODB

[1251] Alvin Cheung, Armando Solar-Lezama, and Samuel Madden. Optimizing database-backed applications with query synthesis. *ACM SIGPLAN Notices*, 48(6):3–14, June 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Singh:2013:AFG

[1252] Rishabh Singh, Sumit Gulwani, and Armando Solar-Lezama. Automated feedback generation for introductory programming assignments. *ACM SIGPLAN Notices*, 48(6):15–26, June 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Gvero:2013:CCU

[1253] Tihomir Gvero, Viktor Kuncak, Ivan Kuraj, and Ruzica Piskac. Complete completion using types and weights. *ACM SIGPLAN Notices*, 48(6):27–38, June 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Johnson:2013:FCP

[1254] Nick P. Johnson, Taewook Oh, Ayal Zaks, and David I. August. Fast condensation of the program dependence graph. *ACM SIGPLAN Notices*, 48 (6):39–50, June 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

ElWazeer:2013:SVD

[1255] Khaled ElWazeer, Kapil Anand, Aparna Kotha, Matthew Smithson, and Rajeev Barua. Scalable variable and data type detection in a binary rewriter. *ACM SIGPLAN Notices*, 48 (6):51–60, June 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Rajaram:2013:FRT

[1256] Bharghava Rajaram, Vijay Nagarajan, Susmit Sarkar, and Marco Elver. Fast RMWs for TSO: semantics and implementation. *ACM SIGPLAN Notices*, 48(6):61–72, June 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Gordon:2013:RGR

[1257] Colin S. Gordon, Michael D. Ernst, and Dan Grossman. Rely-guarantee references for refinement types over aliased mutable data. *ACM SIGPLAN Notices*, 48(6):73–84, June 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Titzer:2013:HCF

[1258] Ben L. Titzer. Harmonizing classes, functions, tuples, and type parameters in Virgil III. *ACM SIGPLAN Notices*, 48(6):85–94, June 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Burckhardt:2013:ACF

[1259] Sebastian Burckhardt, Manuel Fahndrich, Peli de Halleux, Sean McDirmid, Michal Moskal, Nikolai Tillmann, and Jun Kato. It's alive! Continuous feedback in UI programming. *ACM SIGPLAN Notices*, 48(6):95–104, June 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

DeVito:2013:TMS

[1260] Zachary DeVito, James Hegarty, Alex Aiken, Pat Hanrahan, and Jan Vitek. Terra: a multi-stage language for high-performance computing. *ACM SIGPLAN Notices*, 48(6):105–116, June 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Li:2013:SIA

[1261] Jiajia Li, Guangming Tan, Mingyu Chen, and Ninghui Sun. SMAT: an input adaptive auto-tuner for sparse matrix-vector multiplication. *ACM SIGPLAN Notices*, 48(6):117–126, June 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Kong:2013:WPT

[1262] Martin Kong, Richard Veras, Kevin Stock, Franz Franchetti, Louis-Noël Pouchet, and P. Sadayappan. When polyhedral transformations meet SIMD code generation. *ACM SIGPLAN Notices*, 48(6):127–138, June 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Schneider:2013:PLS

[1263] Fred B. Schneider. Programming languages in security: keynote. *ACM SIGPLAN Notices*, 48(6):139–140, June 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Huang:2013:CRL

[1264] Jeff Huang, Charles Zhang, and Julian Dolby. CLAP: recording local executions to reproduce concurrency failures. *ACM SIGPLAN Notices*, 48(6): 141–152, June 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Elmas:2013:CDS

[1265] Tayfun Elmas, Jacob Burnim, George Necula, and Koushik Sen. CONCURRIT: a domain specific language for reproducing concurrency bugs. *ACM SIGPLAN Notices*, 48(6):153–164, June 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Schaefer:2013:DDA

[1266] Max Schäefer, Manu Sridharan, Julian Dolby, and Frank Tip. Dynamic determinacy analysis. *ACM SIGPLAN Notices*, 48(6):165–174, June 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Zhao:2013:FVS

[1267] Jianzhou Zhao, Santosh Nagarakatte, Milo M. K. Martin, and Steve Zdancewic. Formal verification of SSA-based optimizations for LLVM. *ACM SIGPLAN Notices*, 48(6):175–186, June 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Morisset:2013:CTT

[1268] Robin Morisset, Pankaj Pawan, and Francesco Zappa Nardelli. Compiler testing via a theory of sound optimisations in the C11/C++11 memory model. *ACM SIGPLAN Notices*, 48 (6):187–196, June 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Chen:2013:TCF

[1269] Yang Chen, Alex Groce, Chaoqiang Zhang, Weng-Keen Wong, Xiaoli Fern, Eric Eide, and John Regehr. Taming compiler fuzzers. *ACM SIGPLAN Notices*, 48(6):197–208, June 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Blackshear:2013:ACS

[1270] Sam Blackshear and Shuvendu K. Lahiri. Almost-correct specifications: a modular semantic framework for assigning confidence to warnings. *ACM SIGPLAN Notices*, 48(6):209–218, June 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Cook:2013:RAN

[1271] Byron Cook and Eric Koskinen. Reasoning about nondeterminism in programs. *ACM SIGPLAN Notices*, 48 (6):219–230, June 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Qiu:2013:NPS

[1272] Xiaokang Qiu, Pranav Garg, Andrei Stefanescu, and Parthasarathy Madhusudan. Natural proofs for structure, data, and separation. *ACM SIGPLAN Notices*, 48(6):231–242, June 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Yu:2013:GDS

[1273] Hongtao Yu, Hou-Jen Ko, and Zhiyuan Li. General data structure expansion for multi-threading. *ACM SIGPLAN Notices*, 48(6):243–252, June 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Hung:2013:AAS

[1274] Wei-Lun Hung and Vijay K. Garg. AutoSynch: an automatic-signal monitor based on predicate tagging. *ACM SIGPLAN Notices*, 48(6):253–262, June 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Golan-Gueta:2013:CLF

[1275] Guy Golan-Gueta, G. Ramalingam, Mooly Sagiv, and Eran Yahav. Concurrent libraries with foresight. *ACM SIGPLAN Notices*, 48(6):263–274, June 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Blackshear:2013:TPR

[1276] Sam Blackshear, Bor-Yuh Evan Chang, and Manu Sridharan. Thresher: precise refutations for heap reachability. *ACM SIGPLAN Notices*, 48(6): 275–286, June 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Udupa:2013:TSP

[1277] Abhishek Udupa, Arun Raghavan, Jyotirmoy V. Deshmukh, Sela Mador-Haim, Milo M. K. Martin, and Rajeev Alur. TRANSIT: specifying protocols with concolic snippets. *ACM SIGPLAN Notices*, 48(6):287–296, June 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Gao:2013:UMR

[1278] Tiejun Gao, Karin Strauss, Stephen M. Blackburn, Kathryn S. McKinley, Doug Burger, and James Larus. Using managed runtime systems to tolerate holes in wearable memories. *ACM SIGPLAN Notices*, 48(6):297–308, June 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Cohen:2013:LPC

[1279] Nachshon Cohen and Erez Petrank. Limitations of partial compaction: towards practical bounds. *ACM SIGPLAN Notices*, 48(6):309–320, June 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Desai:2013:PSA

[1280] Ankush Desai, Vivek Gupta, Ethan Jackson, Shaz Qadeer, Sriram Rajamani, and Damien Zufferey. P: safe asynchronous event-driven programming. *ACM SIGPLAN Notices*, 48(6): 321–332, June 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Green:2013:QSQ

[1281] Alexander S. Green, Peter LeFanu Lumsdaine, Neil J. Ross, Peter Selinger, and Benoît Valiron. Quipper: a scalable quantum programming language. *ACM SIGPLAN Notices*, 48 (6):333–342, June 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Isradisaikul:2013:REP

[1282] Chinawat Isradisaikul and Andrew C. Myers. Reconciling exhaustive pattern matching with objects. *ACM SIGPLAN Notices*, 48(6):343–354, June 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Bodden:2013:SLS

[1283] Eric Bodden, Társis Tolêdo, Márcio Ribeiro, Claus Brabrand, Paulo Borba, and Mira Mezini. SPL LIFT: statically analyzing software product lines in minutes instead of years. *ACM SIGPLAN Notices*, 48(6):355–364, June 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Zhang:2013:FOA

[1284] Xin Zhang, Mayur Naik, and Hongseok Yang. Finding optimum abstractions in parametric dataflow analysis. *ACM SIGPLAN Notices*, 48(6):

365–376, June 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Apinis:2013:HCW

[1285] Kalmer Apinis, Helmut Seidl, and Vesal Vojdani. How to combine widening and narrowing for non-monotonic systems of equations. *ACM SIGPLAN Notices*, 48(6):377–386, June 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Swamy:2013:VHO

[1286] Nikhil Swamy, Joel Weinberger, Cole Schlesinger, Juan Chen, and Benjamin Livshits. Verifying higher-order programs with the Dijkstra monad. *ACM SIGPLAN Notices*, 48(6):387–398, June 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Sergey:2013:MAI

[1287] Ilya Sergey, Dominique Devriese, Matthew Might, Jan Midtgaard, David Darais, Dave Clarke, and Frank Piessens. Monadic abstract interpreters. *ACM SIGPLAN Notices*, 48 (6):399–410, June 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Czaplicki:2013:AFR

[1288] Evan Czaplicki and Stephen Chong. Asynchronous functional reactive programming for GUIs. *ACM SIGPLAN Notices*, 48(6):411–422, June 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Kastrinis:2013:HCS

[1289] George Kastrinis and Yannis Smaragdakis. Hybrid context-sensitivity for points-to analysis. *ACM SIGPLAN Notices*, 48(6):423–434, June 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Zhang:2013:FAD

[1290] Qirun Zhang, Michael R. Lyu, Hao Yuan, and Zhendong Su. Fast algorithms for Dyck–CFL-reachability with applications to alias analysis. *ACM SIGPLAN Notices*, 48(6):435–446, June 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Sankaranarayanan:2013:SAP

[1291] Sriram Sankaranarayanan, Aleksandar Chakarov, and Sumit Gulwani. Static analysis for probabilistic programs: inferring whole program properties from finitely many paths. *ACM SIGPLAN Notices*, 48(6):447–458, June 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Liang:2013:MVL

[1292] Hongjin Liang and Xinyu Feng. Modular verification of linearizability with non-fixed linearization points. *ACM SIGPLAN Notices*, 48(6):459–470, June 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Sewell:2013:TVV

[1293] Thomas Arthur Leck Sewell, Magnus O. Myreen, and Gerwin Klein.

Translation validation for a verified OS kernel. *ACM SIGPLAN Notices*, 48 (6):471–482, June 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Guha:2013:MVN

[1294] Arjun Guha, Mark Reitblatt, and Nate Foster. Machine-verified network controllers. *ACM SIGPLAN Notices*, 48 (6):483–494, June 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Nowatzki:2013:GCC

[1295] Tony Nowatzki, Michael Sartin-Tarm, Lorenzo De Carli, Karthikeyan Sankaralingam, Cristian Estan, and Behnam Robatmili. A general constraint-centric scheduling framework for spatial architectures. *ACM SIGPLAN Notices*, 48 (6):495–506, June 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Lifflander:2013:STL

[1296] Jonathan Lifflander, Sriram Krishnamoorthy, and Laxmikant V. Kale. Steal Tree: low-overhead tracing of work stealing schedulers. *ACM SIGPLAN Notices*, 48(6):507–518, June 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Ragan-Kelley:2013:HLC

[1297] Jonathan Ragan-Kelley, Connelly Barnes, Andrew Adams, Sylvain Paris, Frédo Durand, and Saman Amarasinghe. Halide: a language and compiler for optimizing parallelism, locality, and recomputation in image processing pipelines. *ACM SIGPLAN Notices*, 48 (6):519–530, June 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Jia:2013:SID

[1298] Ning Jia, Chun Yang, Jing Wang, Dong Tong, and Keyi Wang. SPIRE: improving dynamic binary translation through SPC-indexed indirect branch redirecting. *ACM SIGPLAN Notices*, 48(7):1–12, July 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). VEE '13 Conference proceedings.

vonKoch:2013:LRB

[1299] Tobias J. K. Edler von Koch and Björn Franke. Limits of region-based dynamic binary parallelization. *ACM SIGPLAN Notices*, 48(7):13–22, July 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). VEE '13 Conference proceedings.

Hsu:2013:IDB

[1300] Chun-Chen Hsu, Pangfeng Liu, Jan-Jan Wu, Pen-Chung Yew, Ding-Yong Hong, Wei-Chung Hsu, and Chien-Min Wang. Improving dynamic binary optimization through early-exit guided code region formation. *ACM SIGPLAN Notices*, 48(7):23–32, July 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). VEE '13 Conference proceedings.

Kaufmann:2013:SCO

[1301] Marco Kaufmann and Rainer G. Spallek. Superblock compilation and other optimization techniques for a Java-based DBT machine emulator.

ACM SIGPLAN Notices, 48(7):33–40, July 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). VEE '13 Conference proceedings.

Jo:2013:ELM

[1302] Changyeon Jo, Erik Gustafsson, Jeongseok Son, and Bernhard Egger. Efficient live migration of virtual machines using shared storage. *ACM SIGPLAN Notices*, 48(7):41–50, July 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). VEE '13 Conference proceedings.

Chiang:2013:IBM

[1303] Jui-Hao Chiang, Han-Lin Li, and Tzi cker Chiueh. Introspection-based memory de-duplication and migration. *ACM SIGPLAN Notices*, 48(7):51–62, July 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). VEE '13 Conference proceedings.

Cui:2013:VMV

[1304] Lei Cui, Jianxin Li, Bo Li, Jinpeng Huai, Chunming Hu, Tianyu Wo, Hussain Al-Aqrabi, and Lu Liu. VMScatter: migrate virtual machines to many hosts. *ACM SIGPLAN Notices*, 48 (7):63–72, July 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). VEE '13 Conference proceedings.

Zhou:2013:OVM

[1305] Ruijin Zhou, Fang Liu, Chao Li, and Tao Li. Optimizing virtual machine live storage migration in heterogeneous storage environment. *ACM SIGPLAN Notices*, 48(7):73–84, July 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). VEE '13 Conference proceedings.

Song:2013:PLM

[1306] Xiang Song, Jicheng Shi, Ran Liu, Jian Yang, and Haibo Chen. Parallelizing live migration of virtual machines. *ACM SIGPLAN Notices*, 48(7):85–96, July 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). VEE '13 Conference proceedings.

Fu:2013:EUD

[1307] Yangchun Fu and Zhiqiang Lin. EXTERIOR: using a dual-VM based external shell for guest-OS introspection, configuration, and recovery. *ACM SIGPLAN Notices*, 48(7):97–110, July 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). VEE '13 Conference proceedings.

Dai:2013:LVM

[1308] Yuehua Dai, Yong Qi, Jianbao Ren, Yi Shi, Xiaoguang Wang, and Xuan Yu. A lightweight VMM on many core for high performance computing. *ACM SIGPLAN Notices*, 48(7):111–120, July 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). VEE '13 Conference proceedings.

Yamada:2013:TFT

[1309] Hiroshi Yamada and Kenji Kono. Traveling forward in time to newer operating systems using ShadowReboot.

ACM SIGPLAN Notices, 48(7):121–130, July 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). VEE '13 Conference proceedings.

Jantz:2013:PPO

[1310] Michael R. Jantz and Prasad A. Kulkarni. Performance potential of optimization phase selection during dynamic JIT compilation. *ACM SIGPLAN Notices*, 48(7):131–142, July 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). VEE '13 Conference proceedings.

Lameed:2013:MAS

[1311] Nurudeen A. Lameed and Laurie J. Hendren. A modular approach to on-stack replacement in LLVM. *ACM SIGPLAN Notices*, 48(7):143–154, July 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). VEE '13 Conference proceedings.

Jantz:2013:FAG

[1312] Michael R. Jantz, Carl Strickland, Karthik Kumar, Martin Dimitrov, and Kshitij A. Doshi. A framework for application guidance in virtual memory systems. *ACM SIGPLAN Notices*, 48 (7):155–166, July 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). VEE '13 Conference proceedings.

Chen:2013:TVR

[1313] Chen Chen, Petros Maniatis, Adrian Perrig, Amit Vasudevan, and Vyas Sekar. Towards verifiable resource accounting for outsourced computation. *ACM SIGPLAN Notices*, 48(7): 167–178, July 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). VEE '13 Conference proceedings.

Zhou:2013:LPC

[1314] Ruijin Zhou and Tao Li. Leveraging phase change memory to achieve efficient virtual machine execution. *ACM SIGPLAN Notices*, 48(7):179–190, July 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). VEE '13 Conference proceedings.

Ouyang:2013:PTS

[1315] Jiannan Ouyang and John R. Lange. Preemptable ticket spinlocks: improving consolidated performance in the cloud. *ACM SIGPLAN Notices*, 48 (7):191–200, July 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). VEE '13 Conference proceedings.

Yang:2013:PSC

[1316] Chao Yang, Wei Xue, Haohuan Fu, Lin Gan, Linfeng Li, Yangtong Xu, Yutong Lu, Jiachang Sun, Guangwen Yang, and Weimin Zheng. A peta-scalable CPU-GPU algorithm for global atmospheric simulations. *ACM SIGPLAN Notices*, 48(8):1–12, August 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PPoPP '13 Conference proceedings.

Lifflander:2013:APF

[1317] Jonathan Lifflander, Phil Miller, and Laxmikant Kale. Adoption proto-

cols for fanout-optimal fault-tolerant termination detection. *ACM SIGPLAN Notices*, 48(8):13–22, August 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PPoPP '13 Conference proceedings.

Yuki:2013:ADA

[1318] Tomofumi Yuki, Paul Feautrier, Sanjay Rajopadhye, and Vijay Saraswat. Array dataflow analysis for polyhedral X10 programs. *ACM SIGPLAN Notices*, 48(8):23–34, August 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PPoPP '13 Conference proceedings.

Prountzos:2013:BCA

[1319] Dimitrios Prountzos and Keshav Pingali. Betweenness centrality: algorithms and implementations. *ACM SIGPLAN Notices*, 48(8):35–46, August 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PPoPP '13 Conference proceedings.

Xiang:2013:CAM

[1320] Lingxiang Xiang and Michael Lee Scott. Compiler aided manual speculation for high performance concurrent data structures. *ACM SIGPLAN Notices*, 48(8):47–56, August 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PPoPP '13 Conference proceedings.

Wu:2013:CAA

[1321] Bo Wu, Zhijia Zhao, Eddy Zheng Zhang, Yunlian Jiang, and Xipeng Shen. Complexity analysis and algorithm design for reorganizing data to minimize non-coalesced memory accesses on GPU. *ACM SIGPLAN Notices*, 48(8):57–68, August 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PPoPP '13 Conference proceedings.

Le:2013:CEW

[1322] Nhat Minh Lê, Antoniu Pop, Albert Cohen, and Francesco Zappa Nardelli. Correct and efficient work-stealing for weak memory models. *ACM SIGPLAN Notices*, 48(8):69–80, August 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PPoPP '13 Conference proceedings.

Bergstrom:2013:DOF

[1323] Lars Bergstrom, Matthew Fluet, Mike Rainey, John Reppy, Stephen Rosen, and Adam Shaw. Data-only flattening for nested data parallelism. *ACM SIGPLAN Notices*, 48(8):81–92, August 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PPoPP '13 Conference proceedings.

Morozov:2013:DMT

[1324] Dmitriy Morozov and Gunther Weber. Distributed merge trees. *ACM SIGPLAN Notices*, 48(8):93–102, August 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PPoPP '13 Conference proceedings.

Morrison:2013:FCQ

[1325] Adam Morrison and Yehuda Afek. Fast

concurrent queues for x86 processors. *ACM SIGPLAN Notices*, 48(8):103–112, August 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PPoPP '13 Conference proceedings.

Wamhoff:2013:FIP

[1326] Jons-Tobias Wamhoff, Christof Fetzer, Pascal Felber, Etienne Rivière, and Gilles Muller. FastLane: improving performance of software transactional memory for low thread counts. *ACM SIGPLAN Notices*, 48(8):113–122, August 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PPoPP '13 Conference proceedings.

Barthe:2013:RVS

[1327] Gilles Barthe, Juan Manuel Crespo, Sumit Gulwani, Cesar Kunz, and Mark Marron. From relational verification to SIMD loop synthesis. *ACM SIGPLAN Notices*, 48(8):123–134, August 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PPoPP '13 Conference proceedings.

Shun:2013:LLG

[1328] Julian Shun and Guy E. Blelloch. Ligra: a lightweight graph processing framework for shared memory. *ACM SIGPLAN Notices*, 48(8):135–146, August 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PPoPP '13 Conference proceedings.

Nasre:2013:MAG

[1329] Rupesh Nasre, Martin Burtscher, and Keshav Pingali. Morph algorithms on GPUs. *ACM SIGPLAN Notices*, 48(8):147–156, August 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PPoPP '13 Conference proceedings.

Calciu:2013:NAR

[1330] Irina Calciu, Dave Dice, Yossi Lev, Victor Luchangco, Virendra J. Marathe, and Nir Shavit. NUMA-aware reader-writer locks. *ACM SIGPLAN Notices*, 48(8):157–166, August 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PPoPP '13 Conference proceedings.

Chen:2013:OAO

[1331] Zizhong Chen. Online-ABFT: an online algorithm based fault tolerance scheme for soft error detection in iterative methods. *ACM SIGPLAN Notices*, 48(8):167–176, August 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PPoPP '13 Conference proceedings.

Friedley:2013:OPE

[1332] Andrew Friedley, Torsten Hoefler, Greg Bronevetsky, Andrew Lumsdaine, and Ching-Chen Ma. Ownership passing: efficient distributed memory programming on multi-core systems. *ACM SIGPLAN Notices*, 48(8):177–186, August 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PPoPP '13 Conference proceedings.

Meyerovich:2013:PSS

[1333] Leo A. Meyerovich, Matthew E. Torok, Eric Atkinson, and Rastislav Bodik.

Parallel schedule synthesis for attribute grammars. *ACM SIGPLAN Notices*, 48(8):187–196, August 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PPoPP '13 Conference proceedings.

Deo:2013:PSA

[1334] Mrinal Deo and Sean Keely. Parallel suffix array and least common prefix for the GPU. *ACM SIGPLAN Notices*, 48(8):197–206, August 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PPoPP '13 Conference proceedings.

Chen:2013:SDR

[1335] Yufei Chen and Haibo Chen. Scalable deterministic replay in a parallel full-system emulator. *ACM SIGPLAN Notices*, 48(8):207–218, August 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PPoPP '13 Conference proceedings.

Acar:2013:SPP

[1336] Umut A. Acar, Arthur Chargueraud, and Mike Rainey. Scheduling parallel programs by work stealing with private deques. *ACM SIGPLAN Notices*, 48(8):219–228, August 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PPoPP '13 Conference proceedings.

Yan:2013:SFS

[1337] Shengen Yan, Guoping Long, and Yunquan Zhang. StreamScan: fast scan algorithms for GPUs without global barrier synchronization. *ACM SIGPLAN Notices*, 48(8):229–238, August 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PPoPP '13 Conference proceedings.

Heumann:2013:TEM

[1338] Stephen T. Heumann, Vikram S. Adve, and Shengjie Wang. The tasks with effects model for safe concurrency. *ACM SIGPLAN Notices*, 48(8):239–250, August 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PPoPP '13 Conference proceedings.

Bonetta:2013:TPE

[1339] Daniele Bonetta, Walter Binder, and Cesare Pautasso. TigerQuoll: parallel event-based JavaScript. *ACM SIGPLAN Notices*, 48(8):251–260, August 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PPoPP '13 Conference proceedings.

Dice:2013:UHT

[1340] Dave Dice, Yossi Lev, Yujie Liu, Victor Luchangco, and Mark Moir. Using hardware transactional memory to correct and simplify and readers-writer lock algorithm. *ACM SIGPLAN Notices*, 48(8):261–270, August 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PPoPP '13 Conference proceedings.

Cascaval:2013:ZPW

[1341] Calin Cascaval, Seth Fowler, Pablo Montesinos-Ortego, Wayne Piekarski, Mehrdad Reshadi, Behnam Robatmili,

Michael Weber, and Vrajesh Bhavsar. ZOOMM: a parallel Web browser engine for multicore mobile devices. *ACM SIGPLAN Notices*, 48(8):271–280, August 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PPoPP '13 Conference proceedings.

Grasso:2013:APS

[1342] Ivan Grasso, Klaus Kofler, Biagio Cosenza, and Thomas Fahringer. Automatic problem size sensitive task partitioning on heterogeneous parallel systems. *ACM SIGPLAN Notices*, 48(8): 281–282, August 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PPoPP '13 Conference proceedings.

Liu:2013:DLO

[1343] Jun Liu, Wei Ding, Ohyoung Jang, and Mahmut Kandemir. Data layout optimization for GPGPU architectures. *ACM SIGPLAN Notices*, 48(8): 283–284, August 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PPoPP '13 Conference proceedings.

Padmanabhan:2013:DTO

[1344] Shobana Padmanabhan, Yixin Chen, and Roger D. Chamberlain. Decomposition techniques for optimal design-space exploration of streaming applications. *ACM SIGPLAN Notices*, 48(8): 285–286, August 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PPoPP '13 Conference proceedings.

Yu:2013:EDA

[1345] Xiaodong Yu and Michela Becchi. Exploring different automata representations for efficient regular expression matching on GPUs. *ACM SIGPLAN Notices*, 48(8):287–288, August 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PPoPP '13 Conference proceedings.

Edmonds:2013:EGA

[1346] Nick Edmonds, Jeremiah Willcock, and Andrew Lumsdaine. Expressing graph algorithms using generalized active messages. *ACM SIGPLAN Notices*, 48(8):289–290, August 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PPoPP '13 Conference proceedings.

Lu:2013:MLP

[1347] Ligang Lu and Karen Magerlein. Multilevel parallel computing of reverse time migration for seismic imaging on Blue Gene/Q. *ACM SIGPLAN Notices*, 48(8):291–292, August 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PPoPP '13 Conference proceedings.

Park:2013:PPB

[1348] Changhee Park, Guy L. Steele, Jr., and Jean-Baptiste Tristan. Parallel programming with big operators. *ACM SIGPLAN Notices*, 48(8):293–294, August 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PPoPP '13 Conference proceedings.

Afek:2013:PHL

[1349] Yehuda Afek, Amir Levy, and Adam Morrison. Programming with hardware lock elision. *ACM SIGPLAN Notices*, 48(8):295–296, August 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PPoPP '13 Conference proceedings.

Lu:2013:REM

[1350] Kai Lu, Xu Zhou, Xiaoping Wang, Wenzhe Zhang, and Gen Li. RaceFree: an efficient multi-threading model for determinism. *ACM SIGPLAN Notices*, 48(8):297–298, August 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PPoPP '13 Conference proceedings.

Shun:2013:RCT

[1351] Julian Shun, Guy E. Blelloch, Jeremy T. Fineman, and Phillip B. Gibbons. Reducing contention through priority updates. *ACM SIGPLAN Notices*, 48(8):299–300, August 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PPoPP '13 Conference proceedings.

Diamos:2013:RAM

[1352] Gregory Diamos, Haicheng Wu, Jin Wang, Ashwin Lele, and Sudhakar Yalamanchili. Relational algorithms for multi-bulk-synchronous processors. *ACM SIGPLAN Notices*, 48(8):301–302, August 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PPoPP '13 Conference proceedings.

Carvalho:2013:RET

[1353] Fernando Miguel Carvalho and João Cachopo. Runtime elision of transactional barriers for captured memory. *ACM SIGPLAN Notices*, 48(8):303–304, August 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PPoPP '13 Conference proceedings.

Park:2013:SDR

[1354] Chang-Seo Park, Koushik Sen, and Costin Iancu. Scalable data race detection for partitioned global address space programs. *ACM SIGPLAN Notices*, 48(8):305–306, August 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PPoPP '13 Conference proceedings.

Dice:2013:SSC

[1355] Dave Dice, Yossi Lev, and Mark Moir. Scalable statistics counters. *ACM SIGPLAN Notices*, 48(8):307–308, August 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PPoPP '13 Conference proceedings.

Wozniak:2013:SSD

[1356] Justin M. Wozniak, Timothy G. Armstrong, Michael Wilde, Daniel S. Katz, Ewing Lusk, and Ian T. Foster. Swift/T: scalable data flow programming for many-task applications. *ACM SIGPLAN Notices*, 48(8):309–310, August 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PPoPP '13 Conference proceedings.

Cai:2013:TST

[1357] Yan Cai, Ke Zhai, Shangru Wu, and W. K. Chan. TeamWork: synchronizing threads globally to detect real deadlocks for multithreaded programs. *ACM SIGPLAN Notices*, 48(8):311–312, August 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PPoPP '13 Conference proceedings.

Diouri:2013:TEE

[1358] Mohammed El Mehdi Diouri, Olivier Glück, Laurent Lefèvre, and Franck Cappello. Towards an energy estimator for fault tolerance protocols. *ACM SIGPLAN Notices*, 48(8):313–314, August 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PPoPP '13 Conference proceedings.

Wimmer:2013:WSC

[1359] Martin Wimmer, Daniel Cederman, Jesper Larsson Träff, and Philippas Tsigas. Work-stealing with configurable scheduling strategies. *ACM SIGPLAN Notices*, 48(8):315–316, August 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PPoPP '13 Conference proceedings.

Zhou:2013:WED

[1360] Bowen Zhou, Milind Kulkarni, and Saurabh Bagchi. WuKong: effective diagnosis of bugs at large system scales. *ACM SIGPLAN Notices*, 48(8): 317–318, August 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). PPoPP '13 Conference proceedings.

Norell:2013:IPD

[1361] Ulf Norell. Interactive programming with dependent types. *ACM SIGPLAN Notices*, 48(9):1–2, September 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Traytel:2013:VDP

[1362] Dmitriy Traytel and Tobias Nipkow. Verified decision procedures for MSO on words based on derivatives of regular expressions. *ACM SIGPLAN Notices*, 48(9):3–12, September 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Broadbent:2013:CSC

[1363] Christopher Broadbent, Arnaud Carayol, Matthew Hague, and Olivier Serre. C-SHORe: a collapsible approach to higher-order verification. *ACM SIGPLAN Notices*, 48(9):13–24, September 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Petersen:2013:ASV

[1364] Leaf Petersen, Dominic Orchard, and Neal Glew. Automatic SIMD vectorization for Haskell. *ACM SIGPLAN Notices*, 48(9):25–36, September 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Mainland:2013:EVI

[1365] Geoffrey Mainland, Roman Leshchinskiy, and Simon Peyton Jones. Exploiting vector instructions with generalized stream fusion. *ACM SIGPLAN*

Notices, 48(9):37–48, September 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

McDonell:2013:OPF

[1366] Trevor L. McDonell, Manuel M. T. Chakravarty, Gabriele Keller, and Ben Lippmeier. Optimising purely functional GPU programs. *ACM SIGPLAN Notices*, 48(9):49–60, September 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Bernardy:2013:TTC

[1367] Jean-Philippe Bernardy and Moulin Guilhem. Type-theory in color. *ACM SIGPLAN Notices*, 48(9):61–72, September 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Devriese:2013:TSM

[1368] Dominique Devriese and Frank Piessens. Typed syntactic meta-programming. *ACM SIGPLAN Notices*, 48(9):73–86, September 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Ziliani:2013:MMT

[1369] Beta Ziliani, Derek Dreyer, Neelakantan R. Krishnaswami, Aleksandar Nanevski, and Viktor Vafeiadis. Mtac: a monad for typed tactic programming in Coq. *ACM SIGPLAN Notices*, 48(9):87–100, September 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Dolan:2013:FSF

[1370] Stephen Dolan. Fun with semirings: a functional pearl on the abuse of linear algebra. *ACM SIGPLAN Notices*, 48(9):101–110, September 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Bernardy:2013:EDC

[1371] Jean-Philippe Bernardy and Koen Claessen. Efficient divide-and-conquer parsing of practical context-free languages. *ACM SIGPLAN Notices*, 48 (9):111–122, September 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Mairson:2013:FGT

[1372] Harry George Mairson. Functional geometry and the Traité de Lutherie: functional pearl. *ACM SIGPLAN Notices*, 48(9):123–132, September 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Brady:2013:PRA

[1373] Edwin Brady. Programming and reasoning with algebraic effects and dependent types. *ACM SIGPLAN Notices*, 48(9):133–144, September 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Kammar:2013:HA

[1374] Ohad Kammar, Sam Lindley, and Nicolas Oury. Handlers in action. *ACM SIGPLAN Notices*, 48(9):145–158, September 2013. CODEN SIN-

ODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Jones:2013:CSS

[1375] Simon Peyton Jones. Computer science as a school subject. *ACM SIGPLAN Notices*, 48(9):159–160, September 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Schmidt-Schauss:2013:CSH

[1376] Manfred Schmidt-Schauß and David Sabel. Correctness of an STM Haskell implementation. *ACM SIGPLAN Notices*, 48(9):161–172, September 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Pottier:2013:PPM

[1377] François Pottier and Jonathan Protzenko. Programming with permissions in Mezzo. *ACM SIGPLAN Notices*, 48 (9):173–184, September 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Abel:2013:WRC

[1378] Andreas M. Abel and Brigitte Pientka. Wellfounded recursion with copatterns: a unified approach to termination and productivity. *ACM SIGPLAN Notices*, 48(9):185–196, September 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Atkey:2013:PCG

[1379] Robert Atkey and Conor McBride. Productive coprogramming with guarded recursion. *ACM SIGPLAN Notices*, 48 (9):197–208, September 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Hinze:2013:USR

[1380] Ralf Hinze, Nicolas Wu, and Jeremy Gibbons. Unifying structured recursion schemes. *ACM SIGPLAN Notices*, 48(9):209–220, September 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Krishnaswami:2013:HOF

[1381] Neelakantan R. Krishnaswami. Higher-order functional reactive programming without spacetime leaks. *ACM SIGPLAN Notices*, 48(9):221–232, September 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Jeffrey:2013:FRP

[1382] Alan Jeffrey. Functional reactive programming with liveness guarantees. *ACM SIGPLAN Notices*, 48(9):233–244, September 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Morihata:2013:SCP

[1383] Akimasa Morihata. A short cut to parallelization theorems. *ACM SIGPLAN Notices*, 48(9):245–256, September 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Axelsson:2013:UCP

[1384] Emil Axelsson and Koen Claessen. Using circular programs for higher-order

syntax: functional pearl. *ACM SIGPLAN Notices*, 48(9):257–262, September 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Balabonski:2013:WOM

[1385] Thibaut Balabonski. Weak optimality, and the meaning of sharing. *ACM SIGPLAN Notices*, 48(9):263–274, September 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Weirich:2013:SFE

[1386] Stephanie Weirich, Justin Hsu, and Richard A. Eisenberg. System FC with explicit kind equality. *ACM SIGPLAN Notices*, 48(9):275–286, September 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Sculthorpe:2013:CMP

[1387] Neil Sculthorpe, Jan Bracker, George Giorgidze, and Andy Gill. The constrained-monad problem. *ACM SIGPLAN Notices*, 48(9):287–298, September 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Svenningsson:2013:SCR

[1388] Josef David Svenningsson and Bo Joel Svensson. Simple and compositional reification of monadic embedded languages. *ACM SIGPLAN Notices*, 48 (9):299–304, September 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Hidaka:2013:SRQ

[1389] Soichiro Hidaka, Kazuyuki Asada, Zhenjiang Hu, Hiroyuki Kato, and Keisuke Nakano. Structural recursion for querying ordered graphs. *ACM SIGPLAN Notices*, 48(9):305–318, September 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Delaware:2013:MMM

[1390] Benjamin Delaware, Steven Keuchel, Tom Schrijvers, and Bruno C.d.S. Oliveira. Modular monadic metatheory. *ACM SIGPLAN Notices*, 48 (9):319–330, September 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Lorenzen:2013:MAT

[1391] Florian Lorenzen and Sebastian Erdweg. Modular and automated type-soundness verification for language extensions. *ACM SIGPLAN Notices*, 48 (9):331–342, September 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Keep:2013:NFC

[1392] Andrew W. Keep and R. Kent Dybvig. A nanopass framework for commercial compiler development. *ACM SIGPLAN Notices*, 48(9):343–350, September 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

St-Amour:2013:ERA

[1393] Vincent St-Amour and Neil Toronto. Experience report: applying random

testing to a base type environment. *ACM SIGPLAN Notices*, 48(9):351–356, September 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Petersen:2013:ERF

[1394] Christian L. Petersen, Matthias Gorges, Dustin Dunsmuir, Mark Ansermino, and Guy A. Dumont. Experience report: functional programming of mHealth applications. *ACM SIGPLAN Notices*, 48(9):357–362, September 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Delbianco:2013:HSR

[1395] Germán Andrés Delbianco and Aleksandar Nanevski. Hoare-style reasoning with (algebraic) continuations. *ACM SIGPLAN Notices*, 48(9):363–376, September 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Turon:2013:URH

[1396] Aaron Turon, Derek Dreyer, and Lars Birkedal. Unifying refinement and Hoare-style reasoning in a logic for higher-order concurrency. *ACM SIGPLAN Notices*, 48(9):377–390, September 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Chlipala:2013:BSP

[1397] Adam Chlipala. The bedrock structured programming system: combining generative metaprogramming and Hoare logic in an extensible program verifier. *ACM SIGPLAN Notices*, 48(9):391–402, September 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Cheney:2013:PTL

[1398] James Cheney, Sam Lindley, and Philip Wadler. A practical theory of language-integrated query. *ACM SIGPLAN Notices*, 48(9):403–416, September 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Garcia:2013:CTB

[1399] Ronald Garcia. Calculating threesomes, with blame. *ACM SIGPLAN Notices*, 48(9):417–428, September 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Dunfield:2013:CEB

[1400] Joshua Dunfield and Neelakantan R. Krishnaswami. Complete and easy bidirectional typechecking for higher-rank polymorphism. *ACM SIGPLAN Notices*, 48(9):429–442, September 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Johnson:2013:OAA

[1401] J. Ian Johnson, Nicholas Labich, Matthew Might, and David Van Horn. Optimizing abstract abstract machines. *ACM SIGPLAN Notices*, 48(9):443–454, September 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Hritcu:2013:TNQ

[1402] Catalin Hritcu, John Hughes, Benjamin C. Pierce, Antal Spector-

Zabusky, Dimitrios Vytiniotis, Arthur Azevedo de Amorim, and Leonidas Lampropoulos. Testing noninterference, quickly. *ACM SIGPLAN Notices*, 48(9):455–468, September 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Lopes:2013:EAP

[1403] Cristina V. Lopes. Empirical analysis of programming language adoption. *ACM SIGPLAN Notices*, 48(10): 1–18, October 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). OOPSLA '13 conference proceedings.

Li:2013:SSE

[1404] You Li, Zhendong Su, Linzhang Wang, and Xuandong Li. Steering symbolic execution to less traveled paths. *ACM SIGPLAN Notices*, 48(10):19–32, October 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). OOPSLA '13 conference proceedings.

Carbin:2013:VQR

[1405] Michael Carbin, Sasa Misailovic, and Martin C. Rinard. Verifying quantitative reliability for programs that execute on unreliable hardware. *ACM SIGPLAN Notices*, 48(10):33–52, October 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). OOPSLA '13 conference proceedings.

Huang:2013:ECS

[1406] Jipeng Huang and Michael D. Bond. Efficient context sensitivity for dynamic analyses via calling context uptrees and customized memory management. *ACM SIGPLAN Notices*, 48(10): 53–72, October 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). OOPSLA '13 conference proceedings.

Ureche:2013:MIS

[1407] Vlad Ureche, Cristian Talau, and Martin Odersky. Miniboxing: improving the speed to code size tradeoff in parametric polymorphism translations. *ACM SIGPLAN Notices*, 48(10): 73–92, October 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). OOPSLA '13 conference proceedings.

Shahriyar:2013:TGR

[1408] Rifat Shahriyar, Stephen Michael Blackburn, Xi Yang, and Kathryn S. McKinley. Taking off the gloves with reference counting Immix. *ACM SIGPLAN Notices*, 48(10):93–110, October 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). OOPSLA '13 conference proceedings.

Xu:2013:RTO

[1409] Guoqing Xu. Resurrector: a tunable object lifetime profiling technique for optimizing real-world programs. *ACM SIGPLAN Notices*, 48(10):111–130, October 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). OOPSLA '13 conference proceedings.

Norris:2013:CCC

[1410] Brian Norris and Brian Demsky. CDSChecker: checking concurrent data structures written with C/C++ atomics. *ACM SIGPLAN Notices*, 48(10):

131–150, October 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). OOPSLA '13 conference proceedings.

Raychev:2013:ERD

[1411] Veselin Raychev, Martin Vechev, and Manu Sridharan. Effective race detection for event-driven programs. *ACM SIGPLAN Notices*, 48(10):151–166, October 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). OOPSLA '13 conference proceedings.

Bolz:2013:SSC

[1412] Carl Friedrich Bolz, Lukas Diekmann, and Laurence Tratt. Storage strategies for collections in dynamically typed languages. *ACM SIGPLAN Notices*, 48(10):167–182, October 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). OOPSLA '13 conference proceedings.

Miller:2013:IPG

[1413] Heather Miller, Philipp Haller, Eugene Burmako, and Martin Odersky. Instant pickles: generating object-oriented pickler combinators for fast and extensible serialization. *ACM SIGPLAN Notices*, 48(10):183–202, October 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). OOPSLA '13 conference proceedings.

Salkeld:2013:IDO

[1414] Robin Salkeld and Gregor Kiczales. Interacting with dead objects. *ACM SIGPLAN Notices*, 48(10):203–216, October 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). OOPSLA '13 conference proceedings.

Politz:2013:PFM

[1415] Joe Gibbs Politz, Alejandro Martinez, Matthew Milano, Sumner Warren, Daniel Patterson, Junsong Li, Anand Chitipothu, and Shriram Krishnamurthi. Python: the full monty. *ACM SIGPLAN Notices*, 48(10):217–232, October 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). OOPSLA '13 conference proceedings.

Gerakios:2013:FIS

[1416] Prodromos Gerakios, Aggelos Biboudis, and Yannis Smaragdakis. Forsaking inheritance: supercharged delegation in DelphJ. *ACM SIGPLAN Notices*, 48(10):233–252, October 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). OOPSLA '13 conference proceedings.

Smaragdakis:2013:SBP

[1417] Yannis Smaragdakis, George Balatsouras, and George Kastrinis. Set-based pre-processing for points-to analysis. *ACM SIGPLAN Notices*, 48(10): 253–270, October 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). OOPSLA '13 conference proceedings.

Tetali:2013:MSA

[1418] Sai Deep Tetali, Mohsen Lesani, Rupak Majumdar, and Todd Millstein. MrCrypt: static analysis for secure cloud computations. *ACM SIGPLAN Notices*, 48(10):271–286, October 2013.

CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). OOPSLA '13 conference proceedings.

DeLozier:2013:ICL

[1419] Christian DeLozier, Richard Eisenberg, Santosh Nagarakatte, Peter-Michael Osera, Milo M. K. Martin, and Steve Zdancewic. Ironclad C++: a library-augmented type-safe subset of C++. *ACM SIGPLAN Notices*, 48(10):287–304, October 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). OOPSLA '13 conference proceedings.

Richards:2013:FAC

[1420] Gregor Richards, Christian Hammer, Francesco Zappa Nardelli, Suresh Jagannathan, and Jan Vitek. Flexible access control for JavaScript. *ACM SIGPLAN Notices*, 48(10):305–322, October 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). OOPSLA '13 conference proceedings.

Feldthaus:2013:SAR

[1421] Asger Feldthaus and Anders Møller. Semi-automatic rename refactoring for JavaScript. *ACM SIGPLAN Notices*, 48(10):323–338, October 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). OOPSLA '13 conference proceedings.

Raychev:2013:RS

[1422] Veselin Raychev, Max Schäfer, Manu Sridharan, and Martin Vechev. Refactoring with synthesis. *ACM SIGPLAN Notices*, 48(10):339–354, October 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). OOPSLA '13 conference proceedings.

Bois:2013:BGV

[1423] Kristof Du Bois, Jennifer B. Sartor, Stijn Eyerman, and Lieven Eeckhout. Bottle graphs: visualizing scalability bottlenecks in multi-threaded applications. *ACM SIGPLAN Notices*, 48(10): 355–372, October 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). OOPSLA '13 conference proceedings.

DElia:2013:BLP

[1424] Daniele Cono D'Elia and Camil Demetrescu. Ball–Larus path profiling across multiple loop iterations. *ACM SIGPLAN Notices*, 48(10):373–390, October 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). OOPSLA '13 conference proceedings.

Sharma:2013:DDE

[1425] Rahul Sharma, Eric Schkufza, Berkeley Churchill, and Alex Aiken. Data-driven equivalence checking. *ACM SIGPLAN Notices*, 48(10):391–406, October 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). OOPSLA '13 conference proceedings.

Kneuss:2013:SMR

[1426] Etienne Kneuss, Ivan Kuraj, Viktor Kuncak, and Philippe Suter. Synthesis modulo recursive functions. *ACM SIGPLAN Notices*, 48(10):407–426, October 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print),

1558-1160 (electronic). OOPSLA '13 conference proceedings.

Shi:2013:COU

[1427] Yao Shi, Bernard Blackham, and Gernot Heiser. Code optimizations using formally verified properties. *ACM SIGPLAN Notices*, 48(10):427–442, October 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). OOPSLA '13 conference proceedings.

Dillig:2013:IIG

[1428] Isil Dillig, Thomas Dillig, Boyang Li, and Ken McMillan. Inductive invariant generation via abductive inference. *ACM SIGPLAN Notices*, 48(10):443–456, October 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). OOPSLA '13 conference proceedings.

Hoppe:2013:DDB

[1429] Michael Hoppe and Stefan Hanenberg. Do developers benefit from generic types?: an empirical comparison of generic and raw types in Java. *ACM SIGPLAN Notices*, 48(10):457–474, October 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). OOPSLA '13 conference proceedings.

Dimoulas:2013:OC

[1430] Christos Dimoulas, Robert Bruce Findler, and Matthias Felleisen. Option contracts. *ACM SIGPLAN Notices*, 48(10):475–494, October 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). OOPSLA '13 conference proceedings.

Treichler:2013:LSD

[1431] Sean Treichler, Michael Bauer, and Alex Aiken. Language support for dynamic, hierarchical data partitioning. *ACM SIGPLAN Notices*, 48(10):495–514, October 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). OOPSLA '13 conference proceedings.

Balatsouras:2013:CHC

[1432] George Balatsouras and Yannis Smaragdakis. Class hierarchy complementation: soundly completing a partial type graph. *ACM SIGPLAN Notices*, 48(10):515–532, October 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). OOPSLA '13 conference proceedings.

Ravichandran:2013:MES

[1433] Kaushik Ravichandran and Santosh Pande. Multiverse: efficiently supporting distributed high-level speculation. *ACM SIGPLAN Notices*, 48(10):533–552, October 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). OOPSLA '13 conference proceedings.

Clebsch:2013:FCG

[1434] Sylvan Clebsch and Sophia Drossopoulou. Fully concurrent garbage collection of actors on many-core machines. *ACM SIGPLAN Notices*, 48(10):553–570, October 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). OOPSLA '13 conference proceedings.

Zhao:2013:INT

[1435] Jisheng Zhao, Roberto Lublinerman, Zoran Budimlić, Swarat Chaudhuri, and Vivek Sarkar. Isolation for nested task parallelism. *ACM SIGPLAN Notices*, 48(10):571–588, October 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). OOPSLA '13 conference proceedings.

Tripp:2013:TNP

[1436] Omer Tripp, Eric Koskinen, and Mooly Sagiv. Turning nondeterminism into parallelism. *ACM SIGPLAN Notices*, 48(10):589–604, October 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). OOPSLA '13 conference proceedings.

Chong:2013:BIS

[1437] Nathan Chong, Alastair F. Donaldson, Paul H. J. Kelly, Jeroen Ketema, and Shaz Qadeer. Barrier invariants: a shared state abstraction for the analysis of data-dependent GPU kernels. *ACM SIGPLAN Notices*, 48(10):605–622, October 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). OOPSLA '13 conference proceedings.

Choi:2013:GGT

[1438] Wontae Choi, George Necula, and Koushik Sen. Guided GUI testing of Android apps with minimal restart and approximate learning. *ACM SIGPLAN Notices*, 48(10):623–640, October 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). OOPSLA '13 conference proceedings.

Azim:2013:TDF

[1439] Tanzirul Azim and Iulian Neamtiu. Targeted and depth-first exploration for systematic testing of Android apps. *ACM SIGPLAN Notices*, 48(10):641–660, October 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). OOPSLA '13 conference proceedings.

Kansal:2013:LAB

[1440] Aman Kansal, Scott Saponas, A. J. Bernheim Brush, Kathryn S. McKinley, Todd Mytkowicz, and Ryder Ziola. The latency, accuracy, and battery (LAB) abstraction: programmer productivity and energy efficiency for continuous mobile context sensing. *ACM SIGPLAN Notices*, 48(10):661–676, October 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). OOPSLA '13 conference proceedings.

Bergan:2013:ICS

[1441] Tom Bergan, Luis Ceze, and Dan Grossman. Input-covering schedules for multithreaded programs. *ACM SIGPLAN Notices*, 48(10):677–692, October 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). OOPSLA '13 conference proceedings.

Bond:2013:OCC

[1442] Michael D. Bond, Milind Kulkarni, Man Cao, Minjia Zhang, Meisam Fathi Salmi, Swarnendu Biswas, Aritra Sengupta, and Jipeng Huang. OCTET: capturing and controlling cross-thread dependences efficiently. *ACM SIGPLAN Notices*, 48(10):693–712, October 2013. CODEN SINODQ. ISSN

0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). OOPSLA '13 conference proceedings.

Noll:2013:OFD

[1443] Albert Noll and Thomas Gross. Online feedback-directed optimizations for parallel Java code. *ACM SIGPLAN Notices*, 48(10):713–728, October 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). OOPSLA '13 conference proceedings.

Herhut:2013:RTP

[1444] Stephan Herhut, Richard L. Hudson, Tatiana Shpeisman, and Jaswanth Sreeram. River Trail: a path to parallelism in JavaScript. *ACM SIGPLAN Notices*, 48(10):729–744, October 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). OOPSLA '13 conference proceedings.

Bhattacharya:2013:CCI

[1445] Suparna Bhattacharya, Kanchi Gopinath, and Mangala Gowri Nanda. Combining concern input with program analysis for bloat detection. *ACM SIGPLAN Notices*, 48(10):745–764, October 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). OOPSLA '13 conference proceedings.

Zhang:2013:IMF

[1446] Lingming Zhang, Lu Zhang, and Sarfraz Khurshid. Injecting mechanical faults to localize developer faults for evolving software. *ACM SIGPLAN Notices*, 48(10):765–784, October 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). OOPSLA '13 conference proceedings.

Deng:2013:ECB

[1447] Dongdong Deng, Wei Zhang, and Shan Lu. Efficient concurrency-bug detection across inputs. *ACM SIGPLAN Notices*, 48(10):785–802, October 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). OOPSLA '13 conference proceedings.

Zhong:2013:DAD

[1448] Hao Zhong and Zhendong Su. Detecting API documentation errors. *ACM SIGPLAN Notices*, 48(10):803–816, October 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). OOPSLA '13 conference proceedings.

Bao:2013:FDI

[1449] Tao Bao and Xiangyu Zhang. On-the-fly detection of instability problems in floating-point program execution. *ACM SIGPLAN Notices*, 48(10): 817–832, October 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). OOPSLA '13 conference proceedings.

Coons:2013:BPO

[1450] Katherine E. Coons, Madan Musuvathi, and Kathryn S. McKinley. Bounded partial-order reduction. *ACM SIGPLAN Notices*, 48(10):833–848, October 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). OOPSLA '13 conference proceedings.

Mitchell:2013:FCP

[1451] Nick Mitchell and Peter F. Sweeney. On-the-fly capacity planning. *ACM SIGPLAN Notices*, 48(10):849–866, October 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). OOPSLA '13 conference proceedings.

Vafeiadis:2013:RSL

[1452] Viktor Vafeiadis and Chinmay Narayan. Relaxed separation logic: a program logic for C11 concurrency. *ACM SIGPLAN Notices*, 48(10):867–884, October 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). OOPSLA '13 conference proceedings.

Petrank:2013:SFA

[1453] Erez Petrank. Safety-first approach to memory consistency models. *ACM SIGPLAN Notices*, 48(11):1–2, November 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). ISMM '13 conference proceedings.

Reames:2013:THC

[1454] Philip Reames and George Necula. Towards hinted collection: annotations for decreasing garbage collector pause times. *ACM SIGPLAN Notices*, 48(11):3–14, November 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). ISMM '13 conference proceedings.

Morikawa:2013:ASR

[1455] Kazuya Morikawa, Tomoharu Ugawa, and Hideya Iwasaki. Adaptive scanning reduces sweep time for the Lisp2 mark-compact garbage collector. *ACM SIGPLAN Notices*, 48(11):15–26, November 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). ISMM '13 conference proceedings.

White:2013:CTP

[1456] David R. White, Jeremy Singer, Jonathan M. Aitken, and Richard E. Jones. Control theory for principled heap sizing. *ACM SIGPLAN Notices*, 48(11):27–38, November 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). ISMM '13 conference proceedings.

Brock:2013:PPA

[1457] Jacob Brock, Xiaoming Gu, Bin Bao, and Chen Ding. Pacman: program-assisted cache management. *ACM SIGPLAN Notices*, 48(11):39–50, November 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). ISMM '13 conference proceedings.

Wang:2013:GSE

[1458] Yan Wang, Iulian Neamtiu, and Rajiv Gupta. Generating sound and effective memory debuggers. *ACM SIGPLAN Notices*, 48(11):51–62, November 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). ISMM '13 conference proceedings.

Kalibera:2013:RBR

[1459] Tomas Kalibera and Richard Jones. Rigorous benchmarking in reasonable time. *ACM SIGPLAN Notices*, 48(11):

63–74, November 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). ISMM '13 conference proceedings.

Aigner:2013:ATU

[1460] Martin Aigner and Christoph M. Kirsch. ACDC: towards a universal mutator for benchmarking heap management systems. *ACM SIGPLAN Notices*, 48(11):75–84, November 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). ISMM '13 conference proceedings.

Li:2013:PSC

[1461] Lian Li, Cristina Cifuentes, and Nathan Keynes. Precise and scalable context-sensitive pointer analysis via value flow graph. *ACM SIGPLAN Notices*, 48(11):85–96, November 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). ISMM '13 conference proceedings.

Ravitch:2013:AMO

[1462] Tristan Ravitch and Ben Liblit. Analyzing memory ownership patterns in C libraries. *ACM SIGPLAN Notices*, 48(11):97–108, November 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). ISMM '13 conference proceedings.

Ricci:2013:ETP

[1463] Nathan P. Ricci, Samuel Z. Guyer, and J. Eliot B. Moss. Elephant Tracks: portable production of complete and precise GC traces. *ACM SIGPLAN Notices*, 48(11):109–118, November 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). ISMM '13 conference proceedings.

Bu:2013:BAD

[1464] Yingyi Bu, Vinayak Borkar, Guoqing Xu, and Michael J. Carey. A bloat-aware design for big data applications. *ACM SIGPLAN Notices*, 48(11):119–130, November 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). ISMM '13 conference proceedings.

Ankner:2013:EAH

[1465] Johan Ankner and Josef David Svenningsson. An EDSL approach to high performance Haskell programming. *ACM SIGPLAN Notices*, 48(12): 1–12, December 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). Haskell '14 conference proceedings.

Bernardy:2013:NFP

[1466] Jean-Philippe Bernardy and Nicolas Pouillard. Names for free: polymorphic views of names and binders. *ACM SIGPLAN Notices*, 48(12):13–24, December 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). Haskell '14 conference proceedings.

Bird:2013:UIT

[1467] Richard Bird, Jeremy Gibbons, Stefan Mehner, Janis Voigtländer, and Tom Schrijvers. Understanding idiomatic traversals backwards and forwards. *ACM SIGPLAN Notices*, 48 (12):25–36, December 2013. CODEN SINODQ. ISSN 0362-1340 (print),

1523-2867 (print), 1558-1160 (electronic). Haskell '14 conference proceedings.

Blazevic:2013:ASM

[1468] Mario Blažević. Adding structure to monoids: thus hopefully ending Haskell's string type confusion. *ACM SIGPLAN Notices*, 48(12):37–46, December 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). Haskell '14 conference proceedings.

Claessen:2013:SPN

[1469] Koen Claessen and Michal H. Palka. Splittable pseudorandom number generators using cryptographic hashing. *ACM SIGPLAN Notices*, 48(12):47–58, December 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). Haskell '14 conference proceedings.

Kiselyov:2013:EEA

[1470] Oleg Kiselyov, Amr Sabry, and Cameron Swords. Extensible effects: an alternative to monad transformers. *ACM SIGPLAN Notices*, 48(12): 59–70, December 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). Haskell '14 conference proceedings.

Leslie-Hurd:2013:MVS

[1471] Joe Leslie-Hurd. Maintaining verified software. *ACM SIGPLAN Notices*, 48(12):71–80, December 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). Haskell '14 conference proceedings.

Lindley:2013:HPP

[1472] Sam Lindley and Conor McBride. Hasochism: the pleasure and pain of dependently typed Haskell programming. *ACM SIGPLAN Notices*, 48(12): 81–92, December 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). Haskell '14 conference proceedings.

Lippmeier:2013:DFF

[1473] Ben Lippmeier, Manuel M. T. Chakravarty, Gabriele Keller, and Amos Robinson. Data flow fusion with series expressions in Haskell. *ACM SIGPLAN Notices*, 48(12):93–104, December 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). Haskell '14 conference proceedings.

Liu:2013:ILH

[1474] Hai Liu, Neal Glew, Leaf Petersen, and Todd A. Anderson. The Intel labs Haskell research compiler. *ACM SIGPLAN Notices*, 48(12):105–116, December 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). Haskell '14 conference proceedings.

vanderPloeg:2013:MFR

[1475] Atze van der Ploeg. Monadic functional reactive programming. *ACM SIGPLAN Notices*, 48(12):117–128, December 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). Haskell '14 conference proceedings.

Voellmy:2013:MHP

[1476] Andreas Richard Voellmy, Junchang Wang, Paul Hudak, and Kazuhiko Ya-

mamoto. Mio: a high-performance multicore IO manager for GHC. *ACM SIGPLAN Notices*, 48(12):129–140, December 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). Haskell '14 conference proceedings.

Wortmann:2013:COH

[1477] Peter M. Wortmann and David Duke. Causality of optimized Haskell: what is burning our cycles? *ACM SIGPLAN Notices*, 48(12):141–152, December 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). Haskell '14 conference proceedings.

Birkedal:2014:MRA

[1478] Lars Birkedal. Modular reasoning about concurrent higher-order imperative programs. *ACM SIGPLAN Notices*, 49(1):1, January 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). POPL '14 conference proceedings.

Cousot:2014:GCC

[1479] Patrick' Cousot and Radhia Cousot. A Galois connection calculus for abstract interpretation. *ACM SIGPLAN Notices*, 49(1):3–4, January 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). POPL '14 conference proceedings.

Castagna:2014:PFS

[1480] Giuseppe Castagna, Kim Nguyen, Zhiwu Xu, Hyeonseung Im, Sergueï Lenglet, and Luca Padovani. Polymorphic functions with set-theoretic types: part 1: syntax, semantics, and evaluation. *ACM SIGPLAN Notices*, 49 (1):5–17, January 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). POPL '14 conference proceedings.

Kilpatrick:2014:BRH

[1481] Scott Kilpatrick, Derek Dreyer, Simon Peyton Jones, and Simon Marlow. Backpack: retrofitting Haskell with interfaces. *ACM SIGPLAN Notices*, 49 (1):19–31, January 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). POPL '14 conference proceedings.

Casinghino:2014:CPP

[1482] Chris Casinghino, Vilhelm Sjöberg, and Stephanie Weirich. Combining proofs and programs in a dependently typed language. *ACM SIGPLAN Notices*, 49(1):33–45, January 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). POPL '14 conference proceedings.

Dissegna:2014:TCA

[1483] Stefano Dissegna, Francesco Logozzo, and Francesco Ranzato. Tracing compilation by abstract interpretation. *ACM SIGPLAN Notices*, 49(1):47–59, January 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). POPL '14 conference proceedings.

Ramsay:2014:TDA

[1484] Steven J. Ramsay, Robin P. Neatherway, and C.-H. Luke Ong. A type-directed abstraction refinement approach to higher-order model checking.

ACM SIGPLAN Notices, 49(1):61–72, January 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). POPL '14 conference proceedings.

Coughlin:2014:FTA

[1485] Devin Coughlin and Bor-Yuh Evan Chang. Fissile type analysis: modular checking of almost everywhere invariants. *ACM SIGPLAN Notices*, 49 (1):73–85, January 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). POPL '14 conference proceedings.

Bodin:2014:TMJ

[1486] Martin Bodin, Arthur Charguéraud, Daniele Filaretti, Philippa Gardner, Sergio Maffeis, Daiva Naudziuniene, Alan Schmitt, and Gareth Smith. A trusted mechanised JavaScript specification. *ACM SIGPLAN Notices*, 49(1): 87–100, January 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). POPL '14 conference proceedings.

Krebbers:2014:OAS

[1487] Robbert Krebbers. An operational and axiomatic semantics for non-determinism and sequence points in C. *ACM SIGPLAN Notices*, 49(1): 101–112, January 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). POPL '14 conference proceedings.

Anderson:2014:NSF

[1488] Carolyn Jane Anderson, Nate Foster, Arjun Guha, Jean-Baptiste Jeannin, Dexter Kozen, Cole Schlesinger, and David Walker. NetKAT: semantic foundations for networks. *ACM SIGPLAN Notices*, 49(1):113–126, January 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). POPL '14 conference proceedings.

Sharma:2014:BVT

[1489] Rahul Sharma, Aditya V. Nori, and Alex Aiken. Bias-variance tradeoffs in program analysis. *ACM SIGPLAN Notices*, 49(1):127–137, January 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). POPL '14 conference proceedings.

DSilva:2014:AS

[1490] Vijay D'Silva, Leopold Haller, and Daniel Kroening. Abstract satisfaction. *ACM SIGPLAN Notices*, 49(1): 139–150, January 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). POPL '14 conference proceedings.

Farzan:2014:PC

[1491] Azadeh Farzan, Zachary Kincaid, and Andreas Podelski. Proofs that count. *ACM SIGPLAN Notices*, 49(1):151–164, January 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). POPL '14 conference proceedings.

deAmorim:2014:VIF

[1492] Arthur Azevedo de Amorim, Nathan Collins, André DeHon, Delphine Demange, Catalin Hritcu, David Pichardie, Benjamin C. Pierce, Randy Pollack, and Andrew Tolmach. A verified information-flow architecture.

ACM SIGPLAN Notices, 49(1):165–178, January 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). POPL '14 conference proceedings.

Kumar:2014:CVI

[1493] Ramana Kumar, Magnus O. Myreen, Michael Norrish, and Scott Owens. CakeML: a verified implementation of ML. *ACM SIGPLAN Notices*, 49(1): 179–191, January 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). POPL '14 conference proceedings.

Barthe:2014:PRV

[1494] Gilles Barthe, Cédric Fournet, Benjamin Grégoire, Pierre-Yves Strub, Nikhil Swamy, and Santiago Zanella-Béguelin. Probabilistic relational verification for cryptographic implementations. *ACM SIGPLAN Notices*, 49(1): 193–205, January 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). POPL '14 conference proceedings.

Chaudhuri:2014:BBQ

[1495] Swarat Chaudhuri, Martin Clochard, and Armando Solar-Lezama. Bridging boolean and quantitative synthesis using smoothed proof search. *ACM SIGPLAN Notices*, 49(1):207–220, January 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). POPL '14 conference proceedings.

Beyene:2014:CBA

[1496] Tewodros Beyene, Swarat Chaudhuri, Corneliu Popeea, and Andrey Rybalchenko. A constraint-based approach to solving games on infinite graphs. *ACM SIGPLAN Notices*, 49 (1):221–233, January 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). POPL '14 conference proceedings.

Darulova:2014:SCR

[1497] Eva Darulova and Viktor Kuncak. Sound compilation of reals. *ACM SIGPLAN Notices*, 49(1):235–248, January 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). POPL '14 conference proceedings.

Huet:2014:YRD

[1498] Gérard Huet and Hugo Herbelin. 30 years of research and development around Coq. *ACM SIGPLAN Notices*, 49(1):249, January 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). POPL '14 conference proceedings.

Brookes:2014:ER

[1499] Stephen Brookes, Peter W. O'Hearn, and Uday Reddy. The essence of Reynolds. *ACM SIGPLAN Notices*, 49 (1):251–255, January 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). POPL '14 conference proceedings.

Kuper:2014:FAW

[1500] Lindsey Kuper, Aaron Turon, Neelakantan R. Krishnaswami, and Ryan R. Newton. Freeze after writing: quasi-deterministic parallel programming with LVars. *ACM SIGPLAN Notices*, 49(1):257–270, January 2014.

CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). POPL '14 conference proceedings.

Burckhardt:2014:RDT

[1501] Sebastian Burckhardt, Alexey Gotsman, Hongseok Yang, and Marek Zawirski. Replicated data types: specification, verification, optimality. *ACM SIGPLAN Notices*, 49(1):271–284, January 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). POPL '14 conference proceedings.

Bouajjani:2014:VEC

[1502] Ahmed Bouajjani, Constantin Enea, and Jad Hamza. Verifying eventual consistency of optimistic replication systems. *ACM SIGPLAN Notices*, 49(1):285–296, January 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). POPL '14 conference proceedings.

DalLago:2014:CEH

[1503] Ugo Dal Lago, Davide Sangiorgi, and Michele Alberti. On coinductive equivalences for higher-order probabilistic functional programs. *ACM SIGPLAN Notices*, 49(1):297–308, January 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). POPL '14 conference proceedings.

Ehrhard:2014:PCS

[1504] Thomas Ehrhard, Christine Tasson, and Michele Pagani. Probabilistic coherence spaces are fully abstract for probabilistic PCF. *ACM SIGPLAN Notices*, 49(1):309–320, January 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). POPL '14 conference proceedings.

Gordon:2014:TSD

[1505] Andrew D. Gordon, Thore Graepel, Nicolas Rolland, Claudio Russo, Johannes Borgstrom, and John Guiver. Tabular: a schema-driven probabilistic programming language. *ACM SIGPLAN Notices*, 49(1):321–334, January 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). POPL '14 conference proceedings.

Sergey:2014:MHO

[1506] Ilya Sergey, Dimitrios Vytiniotis, and Simon Peyton Jones. Modular, higher-order cardinality analysis in theory and practice. *ACM SIGPLAN Notices*, 49(1):335–347, January 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). POPL '14 conference proceedings.

Chang:2014:PL

[1507] Stephen Chang and Matthias Felleisen. Profiling for laziness. *ACM SIGPLAN Notices*, 49(1):349–360, January 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). POPL '14 conference proceedings.

Cave:2014:FRP

[1508] Andrew Cave, Francisco Ferreira, Prakash Panangaden, and Brigitte Pientka. Fair reactive programming.

ACM SIGPLAN Notices, 49(1):361–372, January 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). POPL '14 conference proceedings.

Abdulla:2014:ODP

[1509] Parosh Abdulla, Stavros Aronis, Bengt Jonsson, and Konstantinos Sagonas. Optimal dynamic partial order reduction. *ACM SIGPLAN Notices*, 49(1): 373–384, January 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). POPL '14 conference proceedings.

Itzhaky:2014:MRA

[1510] Shachar Itzhaky, Anindya Banerjee, Neil Immerman, Ori Lahav, Aleksandar Nanevski, and Mooly Sagiv. Modular reasoning about heap paths via effectively propositional formulas. *ACM SIGPLAN Notices*, 49(1):385–396, January 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). POPL '14 conference proceedings.

Chong:2014:SCA

[1511] Nathan Chong, Alastair F. Donaldson, and Jeroen Ketema. A sound and complete abstraction for reasoning about parallel prefix sums. *ACM SIGPLAN Notices*, 49(1):397–409, January 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). POPL '14 conference proceedings.

Miller:2014:ADS

[1512] Andrew Miller, Michael Hicks, Jonathan Katz, and Elaine Shi. Authenticated data structures, generically. *ACM SIGPLAN Notices*, 49(1):411–423, January 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). POPL '14 conference proceedings.

Swamy:2014:GTE

[1513] Nikhil Swamy, Cedric Fournet, Aseem Rastogi, Karthikeyan Bhargavan, Juan Chen, Pierre-Yves Strub, and Gavin Bierman. Gradual typing embedded securely in JavaScript. *ACM SIGPLAN Notices*, 49(1):425–437, January 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). POPL '14 conference proceedings.

Long:2014:SIF

[1514] Fan Long, Stelios Sidiroglou-Douskos, Deokhwan Kim, and Martin Rinard. Sound input filter generation for integer overflow errors. *ACM SIGPLAN Notices*, 49(1):439–452, January 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). POPL '14 conference proceedings.

Brotherston:2014:PCS

[1515] James Brotherston and Jules Villard. Parametric completeness for separation theories. *ACM SIGPLAN Notices*, 49(1):453–464, January 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). POPL '14 conference proceedings.

Hou:2014:PSP

[1516] Zhé Hóu, Ranald Clouston, Rajeev Goré, and Alwen Tiu. Proof search for

propositional abstract separation logics via labelled sequents. *ACM SIGPLAN Notices*, 49(1):465–476, January 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). POPL '14 conference proceedings.

Lee:2014:PSS

[1517] Wonyeol Lee and Sungwoo Park. A proof system for separation logic with magic wand. *ACM SIGPLAN Notices*, 49(1):477–490, January 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). POPL '14 conference proceedings.

Atkey:2014:PCL

[1518] Robert Atkey. From parametricity to conservation laws, via Noether's theorem. *ACM SIGPLAN Notices*, 49(1): 491–502, January 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). POPL '14 conference proceedings.

Atkey:2014:RPM

[1519] Robert Atkey, Neil Ghani, and Patricia Johann. A relationally parametric model of dependent type theory. *ACM SIGPLAN Notices*, 49(1):503–515, January 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). POPL '14 conference proceedings.

Murawski:2014:GSI

[1520] Andrzej S. Murawski and Nikos Tzevelekos. Game semantics for interface middleweight Java. *ACM SIGPLAN Notices*, 49(1):517–528, January 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). POPL '14 conference proceedings.

Jeannet:2014:AAG

[1521] Bertrand Jeannet, Peter Schrammel, and Sriram Sankaranarayanan. Abstract acceleration of general linear loops. *ACM SIGPLAN Notices*, 49(1): 529–540, January 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). POPL '14 conference proceedings.

DAntoni:2014:MSA

[1522] Loris D'Antoni and Margus Veanes. Minimization of symbolic automata. *ACM SIGPLAN Notices*, 49(1):541–553, January 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). POPL '14 conference proceedings.

Chaudhuri:2014:CAD

[1523] Swarat Chaudhuri, Azadeh Farzan, and Zachary Kincaid. Consistency analysis of decision-making programs. *ACM SIGPLAN Notices*, 49(1):555–567, January 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). POPL '14 conference proceedings.

Zhang:2014:TGD

[1524] Danfeng Zhang and Andrew C. Myers. Toward general diagnosis of static errors. *ACM SIGPLAN Notices*, 49(1): 569–581, January 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). POPL '14 conference proceedings.

Chen:2014:CFT

[1525] Sheng Chen and Martin Erwig. Counter-factual typing for debugging type errors. *ACM SIGPLAN Notices*, 49(1):583–594, January 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). POPL '14 conference proceedings.

Boker:2014:BTS

[1526] Udi Boker, Thomas A. Henzinger, and Arjun Radhakrishna. Battery transition systems. *ACM SIGPLAN Notices*, 49(1):595–606, January 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). POPL '14 conference proceedings.

Li:2014:SOS

[1527] Yi Li, Aws Albarghouthi, Zachary Kincaid, Arie Gurfinkel, and Marsha Chechik. Symbolic optimization with SMT solvers. *ACM SIGPLAN Notices*, 49(1):607–618, January 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). POPL '14 conference proceedings.

Benton:2014:AEP

[1528] Nick Benton, Martin Hofmann, and Vivek Nigam. Abstract effects and proof-relevant logical relations. *ACM SIGPLAN Notices*, 49(1):619–631, January 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). POPL '14 conference proceedings.

Katsumata:2014:PEM

[1529] Shin ya Katsumata. Parametric effect monads and semantics of effect systems. *ACM SIGPLAN Notices*, 49(1): 633–645, January 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). POPL '14 conference proceedings.

Pagani:2014:AQS

[1530] Michele Pagani, Peter Selinger, and Benoît Valiron. Applying quantitative semantics to higher-order quantum computing. *ACM SIGPLAN Notices*, 49(1):647–658, January 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). POPL '14 conference proceedings.

Accattoli:2014:NST

[1531] Beniamino Accattoli, Eduardo Bonelli, Delia Kesner, and Carlos Lombardi. A nonstandard standardization theorem. *ACM SIGPLAN Notices*, 49(1): 659–670, January 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). POPL '14 conference proceedings.

Eisenberg:2014:CTF

[1532] Richard A. Eisenberg, Dimitrios Vytiniotis, Simon Peyton Jones, and Stephanie Weirich. Closed type families with overlapping equations. *ACM SIGPLAN Notices*, 49(1):671–683, January 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). POPL '14 conference proceedings.

Lerner:2014:TRT

[1533] Benjamin S. Lerner, Joe Gibbs Politz, Arjun Guha, and Shriram Krishnamurthi. TeJaS: retrofitting type systems for JavaScript. *ACM SIGPLAN Notices*, 49(2):1–16, February 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). DLS '13 conference proceedings.

Kashyap:2014:TRS

[1534] Vineeth Kashyap, John Sarracino, John Wagner, Ben Wiedermann, and Ben Hardekopf. Type refinement for static analysis of JavaScript. *ACM SIGPLAN Notices*, 49(2):17–26, February 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). DLS '13 conference proceedings.

Allende:2014:CIS

[1535] Esteban Allende, Johan Fabry, and Éric Tanter. Cast insertion strategies for gradually-typed objects. *ACM SIGPLAN Notices*, 49(2):27–36, February 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). DLS '13 conference proceedings.

Kedlaya:2014:ITS

[1536] Madhukar N. Kedlaya, Jared Roesch, Behnam Robatmili, Mehrdad Reshadi, and Ben Hardekopf. Improved type specialization for dynamic scripting languages. *ACM SIGPLAN Notices*, 49(2):37–48, February 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). DLS '13 conference proceedings.

Keil:2014:EDA

[1537] Matthias Keil and Peter Thiemann. Efficient dynamic access analysis using JavaScript proxies. *ACM SIGPLAN Notices*, 49(2):49–60, February 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). DLS '13 conference proceedings.

Weiher:2014:PIU

[1538] Marcel Weiher and Robert Hirschfeld. Polymorphic identifiers: uniform resource access in Objective-Smalltalk. *ACM SIGPLAN Notices*, 49(2):61–72, February 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). DLS '13 conference proceedings.

Park:2014:AAS

[1539] Changhee Park, Hongki Lee, and Sukyoung Ryu. All about the with statement in JavaScript: removing with statements in JavaScript applications. *ACM SIGPLAN Notices*, 49(2):73–84, February 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). DLS '13 conference proceedings.

Lameed:2014:OMF

[1540] Nurudeen A. Lameed and Laurie J. Hendren. Optimizing MATLAB `feval` with dynamic techniques. *ACM SIGPLAN Notices*, 49(2):85–96, February 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). DLS '13 conference proceedings.

Yoo:2014:WRR

[1541] Danny Yoo and Shriram Krishnamurthi. Whalesong: running Racket in the browser. *ACM SIGPLAN Notices*, 49(2):97–108, February 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). DLS '13 conference proceedings.

Bodik:2014:MBS

[1542] Rastislav Bodik. Modeling biology with solver-aided programming languages. *ACM SIGPLAN Notices*, 49(3):1–2, March 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Erdweg:2014:FEL

[1543] Sebastian Erdweg and Felix Rieger. A framework for extensible languages. *ACM SIGPLAN Notices*, 49(3):3–12, March 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Flatt:2014:SRY

[1544] Matthew Flatt. Submodules in Racket: you want it when, again? *ACM SIGPLAN Notices*, 49(3):13–22, March 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Dyer:2014:DVE

[1545] Robert Dyer, Hridesh Rajan, and Tien N. Nguyen. Declarative visitors to ease fine-grained source code mining with full history on billions of AST nodes. *ACM SIGPLAN Notices*, 49(3):23–32, March 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Solodkyy:2014:OPM

[1546] Yuriy Solodkyy, Gabriel Dos Reis, and Bjarne Stroustrup. Open pattern matching for C++. *ACM SIGPLAN Notices*, 49(3):33–42, March 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Martin:2014:TCR

[1547] Marko Martin, Mira Mezini, and Sebastian Erdweg. Template constructors for reusable object initialization. *ACM SIGPLAN Notices*, 49(3):43–52, March 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Richard-Foy:2014:EHL

[1548] Julien Richard-Foy, Olivier Barais, and Jean-Marc Jézéquel. Efficient high-level abstractions for Web programming. *ACM SIGPLAN Notices*, 49(3):53–60, March 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Gerakios:2014:RTP

[1549] Prodromos Gerakios, Aggelos Biboudis, and Yannis Smaragdakis. Reified type parameters using Java annotations. *ACM SIGPLAN Notices*, 49(3):61–64, March 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Schulze:2014:DDP

[1550] Sandro Schulze, Jörg Liebig, Janet Siegmund, and Sven Apel. Does the discipline of preprocessor annotations matter?: a controlled experiment. *ACM SIGPLAN Notices*, 49(3):65–74,

March 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Medeiros:2014:IPB

[1551] Flávio Medeiros, Márcio Ribeiro, and Rohit Gheyi. Investigating preprocessor-based syntax errors. *ACM SIGPLAN Notices*, 49(3):75–84, March 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Kramer:2014:UDO

[1552] Dean Kramer, Samia Oussena, Peter Komisarczuk, and Tony Clark. Using document-oriented GUIs in dynamic software product lines. *ACM SIGPLAN Notices*, 49(3):85–94, March 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Siegmund:2014:FBP

[1553] Norbert Siegmund, Alexander von Rhein, and Sven Apel. Family-based performance measurement. *ACM SIGPLAN Notices*, 49(3):95–104, March 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Marek:2014:SRC

[1554] Lukás Marek, Stephen Kell, Yudi Zheng, Lubomír Bulej, Walter Binder, Petr Tuma, Danilo Ansaloni, Aibek Sarimbekov, and Andreas Sewe. ShadowVM: robust and comprehensive dynamic program analysis for the Java platform. *ACM SIGPLAN Notices*, 49(3):105–114, March 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Kolesnikov:2014:CPB

[1555] Sergiy Kolesnikov, Alexander von Rhein, Claus Hunsen, and Sven Apel. A comparison of product-based, feature-based, and family-based type checking. *ACM SIGPLAN Notices*, 49(3):115–124, March 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Ofenbeck:2014:SST

[1556] Georg Ofenbeck, Tiark Rompf, Alen Stojanov, Martin Odersky, and Markus Püschel. Spiral in Scala: towards the systematic construction of generators for performance libraries. *ACM SIGPLAN Notices*, 49(3):125–134, March 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Chapin:2014:SNT

[1557] Peter Chapin, Christian Skalka, Scott Smith, and Michael Watson. Scalaness/nesT: type specialized staged programming for sensor networks. *ACM SIGPLAN Notices*, 49(3): 135–144, March 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Sujeeth:2014:FGH

[1558] Arvind K. Sujeeth, Austin Gibbons, Kevin J. Brown, HyoukJoong Lee, Tiark Rompf, Martin Odersky, and Kunle Olukotun. Forge: generating a high performance DSL implementation from a declarative specification. *ACM SIGPLAN Notices*, 49(3):

145–154, March 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Kurilova:2014:SSL

[1559] Darya Kurilova and Derek Rayside. On the simplicity of synthesizing linked data structure operations. *ACM SIGPLAN Notices*, 49(3):155–158, March 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Dhungana:2014:GCD

[1560] Deepak Dhungana, Andreas Falkner, and Alois Haselböck. Generation of conjoint domain models for system-of-systems. *ACM SIGPLAN Notices*, 49 (3):159–168, March 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Basso:2014:SLS

[1561] Fábio Paulo Basso, Raquel Mainardi Pillat, Toacy Cavalcante Oliveira, and Leandro Buss Becker. Supporting large scale model transformation reuse. *ACM SIGPLAN Notices*, 49(3):169–178, March 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

An:2014:MDG

[1562] Kyoungho An, Takayuki Kuroda, Aniroddha Gokhale, Sumant Tambe, and Andrea Sorbini. Model-driven generative framework for automated OMG DDS performance testing in the cloud. *ACM SIGPLAN Notices*, 49(3): 179–182, March 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Vitek:2014:SCR

[1563] Jan Vitek. SIGPLAN Chair's report. *ACM SIGPLAN Notices*, 49(4S): 1, April 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Gibbons:2014:SVC

[1564] Jeremy Gibbons. SIGPLAN Vice-Chair's report. *ACM SIGPLAN Notices*, 49(4S):2, April 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Black:2014:SSR

[1565] Andrew Black. SIGPLAN Secretary's report. *ACM SIGPLAN Notices*, 49 (4S):3, April 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Lopes:2014:STR

[1566] Cristina V. Lopes. SIGPLAN Treasurer's report. *ACM SIGPLAN Notices*, 49(4S):4, April 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Dreyer:2014:SA

[1567] Derek Dreyer. SIGPLAN awards. *ACM SIGPLAN Notices*, 49(4S):5–7, April 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Lawall:2014:SPA

[1568] Julia Lawall and Cristina V. Lopes. SIGPLAN Professional Activities Committee Report. *ACM SIGPLAN Notices*, 49(4S):8, April 2014. CODEN

SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Hind:2014:SRH

[1569] Michael Hind. SIGPLAN Research Highlights Annual Report. *ACM SIGPLAN Notices*, 49(4S):9, April 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Sewell:2014:PPC

[1570] Peter Sewell. POPL 2014 Program Chair's report. *ACM SIGPLAN Notices*, 49(4S):10–26, April 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Lopes:2014:OTP

[1571] Cristina V. Lopes. The OOPSLA two-phase review process. *ACM SIGPLAN Notices*, 49(4S):27–32, April 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Boehm:2014:PP

[1572] Hans Boehm, Jack Davidson, Kathleen Fisher, Cormac Flanagan, Jeremy Gibbons, Mary Hall, Graham Hutton, David Padua, Frank Tip, Jan Vitek, and Philip Wadler. Practices of PLDI. *ACM SIGPLAN Notices*, 49(4S):33–38, April 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Fahndrich:2014:SAS

[1573] Manuel Fähndrich and Francesco Logozzo. SAS2013 artifact submission experience report. *ACM SIGPLAN Notices*, 49(4S):39–40, April 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Gay:2014:NLH

[1574] David Gay, Philip Levis, Robert von Behren, Matt Welsh, Eric Brewer, and David Culler. The nesC language: a holistic approach to networked embedded systems. *ACM SIGPLAN Notices*, 49(4S):41–51, April 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

LeBotlan:2014:MRM

[1575] Didier Le Botlan and Didier Rémy. MLF: raising ML to the power of System F. *ACM SIGPLAN Notices*, 49 (4S):52–63, April 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Harris:2014:LSL

[1576] Tim Harris and Keir Fraser. Language support for lightweight transactions. *ACM SIGPLAN Notices*, 49 (4S):64–78, April 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Henzinger:2014:AP

[1577] Thomas A. Henzinger, Ranjit Jhala, Rupak Majumdar, and Kenneth L. McMillan. Abstractions from proofs. *ACM SIGPLAN Notices*, 49(4S):79–91, April 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Kulkarni:2014:EED

[1578] Prasad A. Kulkarni. Energy efficient data access techniques. *ACM SIGPLAN Notices*, 49(5):1, May 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Spink:2014:ECG

[1579] Tom Spink, Harry Wagstaff, Björn Franke, and Nigel Topham. Efficient code generation in a region-based dynamic binary translator. *ACM SIGPLAN Notices*, 49(5):3–12, May 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Lezuo:2014:COC

[1580] Roland Lezuo, Philipp Paulweber, and Andreas Krall. CASM: optimized compilation of abstract state machines. *ACM SIGPLAN Notices*, 49(5):13–22, May 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Lozano:2014:CSC

[1581] Roberto Castañeda Lozano, Mats Carlsson, Gabriel Hjort Blindell, and Christian Schulte. Combinatorial spill code optimization and ultimate coalescing. *ACM SIGPLAN Notices*, 49 (5):23–32, May 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Ballabriga:2014:CRP

[1582] Clément Ballabriga, Lee Kee Chong, and Abhik Roychoudhury. Cache-related preemption delay analysis for FIFO caches. *ACM SIGPLAN Notices*, 49(5):33–42, May 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Henry:2014:HCW

[1583] Julien Henry, Mihail Asavoae, David Monniaux, and Claire Maïza. How to compute worst-case execution time by optimization modulo theory and a clever encoding of program semantics. *ACM SIGPLAN Notices*, 49(5):43–52, May 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Zheng:2014:WAD

[1584] Wenguang Zheng and Hui Wu. WCET: aware dynamic instruction cache locking. *ACM SIGPLAN Notices*, 49 (5):53–62, May 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Martins:2014:ECO

[1585] Luiz G. A. Martins, Ricardo Nobre, Alexandre C. B. Delbem, Eduardo Marques, and João M. P. Cardoso. Exploration of compiler optimization sequences using clustering-based selection. *ACM SIGPLAN Notices*, 49 (5):63–72, May 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Chandramohan:2014:PDP

[1586] Kiran Chandramohan and Michael F. P. O'Boyle. Partitioning data-parallel programs for heterogeneous MPSoCs: time and energy design space exploration. *ACM SIGPLAN Notices*, 49(5):73–82, May 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Guo:2014:EED

[1587] Minyi Guo. Energy efficient data access and storage through HW/SW codesign. *ACM SIGPLAN Notices*, 49(5): 83, May 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

vonKoch:2014:EFS

[1588] Tobias J. K. Edler von Koch, Björn Franke, Pranav Bhandarkar, and Anshuman Dasgupta. Exploiting function similarity for code size reduction. *ACM SIGPLAN Notices*, 49(5):85–94, May 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Roy:2014:AAS

[1589] Pooja Roy, Rajarshi Ray, Chundong Wang, and Weng Fai Wong. ASAC: automatic sensitivity analysis for approximate computing. *ACM SIGPLAN Notices*, 49(5):95–104, May 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Chaudhary:2014:ESC

[1590] Sandeep Chaudhary, Sebastian Fischmeister, and Lin Tan. em-SPADE: a compiler extension for checking rules extracted from processor specifications. *ACM SIGPLAN Notices*, 49(5):105–114, May 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Beaugnon:2014:VVO

[1591] Ulysse Beaugnon, Alexey Kravets, Sven van Haastregt, Riyadh Baghdadi, David Tweed, Javed Absar, and Anton Lokhmotov. VOBLA: a vehicle for optimized basic linear algebra. *ACM SIGPLAN Notices*, 49(5):115–124, May 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Bebelis:2014:FSP

[1592] Vagelis Bebelis, Pascal Fradet, and Alain Girault. A framework to schedule parametric dataflow applications on many-core platforms. *ACM SIGPLAN Notices*, 49(5):125–134, May 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Lee:2014:IPL

[1593] Jinyong Lee, Jongwon Lee, Jongeun Lee, and Yunheung Paek. Improving performance of loops on DIAM-based VLIW architectures. *ACM SIGPLAN Notices*, 49(5):135–144, May 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Wingbermuehle:2014:SMS

[1594] Joseph G. Wingbermuehle, Ron K. Cytron, and Roger D. Chamberlain. Superoptimization of memory subsystems. *ACM SIGPLAN Notices*, 49(5): 145–154, May 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Kim:2014:LBL

[1595] Hongjune Kim, Seonmyeong Bak, and Jaejin Lee. Lightweight and block-level concurrent sweeping for JavaScript garbage collection. *ACM SIGPLAN Notices*, 49(5):155–164, May 2014. CODEN SINODQ. ISSN 0362-1340

(print), 1523-2867 (print), 1558-1160 (electronic).

Padua:2014:WEI

[1596] David Padua. What exactly is inexact computation good for? *ACM SIGPLAN Notices*, 49(6):1, June 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Kuper:2014:TPE

[1597] Lindsey Kuper, Aaron Todd, Sam Tobin-Hochstadt, and Ryan R. Newton. Taming the parallel effect zoo: extensible deterministic parallelism with LVish. *ACM SIGPLAN Notices*, 49 (6):2–14, June 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Surendran:2014:TDR

[1598] Rishi Surendran, Raghavan Raman, Swarat Chaudhuri, John Mellor-Crummey, and Vivek Sarkar. Test-driven repair of data races in structured parallel programs. *ACM SIGPLAN Notices*, 49(6):15–25, June 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Stork:2014:APB

[1599] Sven Stork, Karl Naden, Joshua Sunshine, Manual Mohr, Alcides Fonseca, Paulo Marques, and Jonathan Aldrich. Æminium: a permission based concurrent-by-default programming language approach. *ACM SIGPLAN Notices*, 49(6):26, June 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Jagannathan:2014:ARV

[1600] Suresh Jagannathan, Vincent Laporte, Gustavo Petri, David Pichardie, and Jan Vitek. Atomicity refinement for verified compilation. *ACM SIGPLAN Notices*, 49(6):27, June 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Biswas:2014:DES

[1601] Swarnendu Biswas, Jipeng Huang, Aritra Sengupta, and Michael D. Bond. DoubleChecker: efficient sound and precise atomicity checking. *ACM SIGPLAN Notices*, 49(6):28–39, June 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Alglave:2014:HCM

[1602] Jade Alglave, Luc Maranget, and Michael Tautschnig. Herding cats: modelling, simulation, testing, and data-mining for weak memory. *ACM SIGPLAN Notices*, 49(6):40, June 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Rompf:2014:SPJ

[1603] Tiark Rompf, Arvind K. Sujeeth, Kevin J. Brown, HyoukJoong Lee, Hassan Chafi, and Kunle Olukotun. Surgical precision JIT compilers. *ACM SIGPLAN Notices*, 49(6):41–52, June 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Schkufza:2014:SOF

[1604] Eric Schkufza, Rahul Sharma, and Alex Aiken. Stochastic optimization

of floating-point programs with tunable precision. *ACM SIGPLAN Notices*, 49 (6):53–64, June 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Stock:2014:FED

[1605] Kevin Stock, Martin Kong, Tobias Grosser, Louis-Noël Pouchet, Fabrice Rastello, J. Ramanujam, and P. Sadayappan. A framework for enhancing data reuse via associative reordering. *ACM SIGPLAN Notices*, 49(6):65–76, June 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

DeVito:2014:FCR

[1606] Zachary DeVito, Daniel Ritchie, Matt Fisher, Alex Aiken, and Pat Hanrahan. First-class runtime generation of high-performance types using exotypes. *ACM SIGPLAN Notices*, 49(6):77–88, June 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Greenman:2014:GFB

[1607] Ben Greenman, Fabian Muehlboeck, and Ross Tate. Getting F-bounded polymorphism into shape. *ACM SIGPLAN Notices*, 49(6):89–99, June 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Simon:2014:OIF

[1608] Axel Simon. Optimal inference of fields in row-polymorphic records. *ACM SIGPLAN Notices*, 49(6):100–111, June 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Sampson:2014:EVP

[1609] Adrian Sampson, Pavel Panchekha, Todd Mytkowicz, Kathryn S. McKinley, Dan Grossman, and Luis Ceze. Expressing and verifying probabilistic assertions. *ACM SIGPLAN Notices*, 49 (6):112–122, June 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Borges:2014:CSS

[1610] Mateus Borges, Antonio Filieri, Marcelo d'Amorim, Corina S. Pasareanu, and Willem Visser. Compositional solution space quantification for probabilistic software analysis. *ACM SIGPLAN Notices*, 49(6):123–132, June 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Hur:2014:SPP

[1611] Chung-Kil Hur, Aditya V. Nori, Sriram K. Rajamani, and Selva Samuel. Slicing probabilistic programs. *ACM SIGPLAN Notices*, 49(6):133–144, June 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Cai:2014:TCH

[1612] Yufei Cai, Paolo G. Giarrusso, Tillmann Rendel, and Klaus Ostermann. A theory of changes for higher-order languages: incrementalizing λ-calculi by static differentiation. *ACM SIGPLAN Notices*, 49(6):145–155, June 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Hammer:2014:ACD

[1613] Matthew A. Hammer, Khoo Yit Phang, Michael Hicks, and Jeffrey S. Foster. Adapton: composable, demand-driven incremental computation. *ACM SIGPLAN Notices*, 49(6): 156–166, June 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Aung:2014:SS

[1614] Min Aung, Susan Horwitz, Rich Joiner, and Thomas Reps. Specialization slicing. *ACM SIGPLAN Notices*, 49 (6):167, June 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Hoare:2014:LCP

[1615] Tony Hoare. Laws of concurrent programming. *ACM SIGPLAN Notices*, 49(6):168, June 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Sridharan:2014:AEP

[1616] Srinath Sridharan, Gagan Gupta, and Gurindar S. Sohi. Adaptive, efficient, parallel execution of parallel programs. *ACM SIGPLAN Notices*, 49 (6):169–180, June 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Gupta:2014:GPR

[1617] Gagan Gupta, Srinath Sridharan, and Gurindar S. Sohi. Globally precise-restartable execution of parallel programs. *ACM SIGPLAN Notices*, 49 (6):181–192, June 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Mitra:2014:AAP

[1618] Subrata Mitra, Ignacio Laguna, Dong H. Ahn, Saurabh Bagchi, Martin Schulz, and Todd Gamblin. Accurate application progress analysis for large-scale parallel debugging. *ACM SIGPLAN Notices*, 49(6):193–203, June 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Tavarageri:2014:CAD

[1619] Sanket Tavarageri, Sriram Krishnamoorthy, and P. Sadayappan. Compiler-assisted detection of transient memory errors. *ACM SIGPLAN Notices*, 49(6):204–215, June 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Le:2014:CVE

[1620] Vu Le, Mehrdad Afshari, and Zhendong Su. Compiler validation via equivalence modulo inputs. *ACM SIGPLAN Notices*, 49(6):216–226, June 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Long:2014:ARE

[1621] Fan Long, Stelios Sidiroglou-Douskos, and Martin Rinard. Automatic runtime error repair and containment via recovery shepherding. *ACM SIGPLAN Notices*, 49(6):227–238, June 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Zhang:2014:ARP

[1622] Xin Zhang, Ravi Mangal, Radu Grigore, Mayur Naik, and Hongseok Yang.

On abstraction refinement for program analyses in Datalog. *ACM SIGPLAN Notices*, 49(6):239–248, June 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Zhang:2014:HTB

[1623] Xin Zhang, Ravi Mangal, Mayur Naik, and Hongseok Yang. Hybrid top-down and bottom-up interprocedural analysis. *ACM SIGPLAN Notices*, 49(6): 249–258, June 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Arzt:2014:FPC

[1624] Steven Arzt, Siegfried Rasthofer, Christian Fritz, Eric Bodden, Alexandre Bartel, Jacques Klein, Yves Le Traon, Damien Octeau, and Patrick McDaniel. FlowDroid: precise context, flow, field, object-sensitive and lifecycle-aware taint analysis for Android apps. *ACM SIGPLAN Notices*, 49(6):259–269, June 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Carbonneaux:2014:EEV

[1625] Quentin Carbonneaux, Jan Hoffmann, Tahina Ramananandro, and Zhong Shao. End-to-end verification of stack-space bounds for C programs. *ACM SIGPLAN Notices*, 49(6):270–281, June 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Ball:2014:VTV

[1626] Thomas Ball, Nikolaj Bjørner, Aaron Gember, Shachar Itzhaky, Aleksandr Karbyshev, Mooly Sagiv, Michael Schapira, and Asaf Valadarsky. VeriCon: towards verifying controller programs in software-defined networks. *ACM SIGPLAN Notices*, 49(6):282–293, June 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Logozzo:2014:VMV

[1627] Francesco Logozzo, Shuvendu K. Lahiri, Manuel Fähndrich, and Sam Blackshear. Verification modulo versions: towards usable verification. *ACM SIGPLAN Notices*, 49(6):294–304, June 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Dimitrov:2014:CRD

[1628] Dimitar Dimitrov, Veselin Raychev, Martin Vechev, and Eric Koskinen. Commutativity race detection. *ACM SIGPLAN Notices*, 49(6):305–315, June 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Maiya:2014:RDA

[1629] Pallavi Maiya, Aditya Kanade, and Rupak Majumdar. Race detection for Android applications. *ACM SIGPLAN Notices*, 49(6):316–325, June 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Hsiao:2014:RDE

[1630] Chun-Hung Hsiao, Jie Yu, Satish Narayanasamy, Ziyun Kong, Cristiano L. Pereira, Gilles A. Pokam, Peter M. Chen, and Jason Flinn. Race

detection for event-driven mobile applications. *ACM SIGPLAN Notices*, 49 (6):326–336, June 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Huang:2014:MSP

[1631] Jeff Huang, Patrick O'Neil Meredith, and Grigore Rosu. Maximal sound predictive race detection with control flow abstraction. *ACM SIGPLAN Notices*, 49(6):337–348, June 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

David:2014:TBC

[1632] Yaniv David and Eran Yahav. Traceletbased code search in executables. *ACM SIGPLAN Notices*, 49(6):349–360, June 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Pombrio:2014:RLE

[1633] Justin Pombrio and Shriram Krishnamurthi. Resugaring: lifting evaluation sequences through syntactic sugar. *ACM SIGPLAN Notices*, 49 (6):361–371, June 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

vonHanxleden:2014:SSC

[1634] Reinhard von Hanxleden, Björn Duderstadt, Christian Motika, Steven Smyth, Michael Mendler, Joaquín Aguado, Stephen Mercer, and Owen O'Brien. SCCharts: sequentially constructive statecharts for safety-critical applications: HW/SW-synthesis for a conservative extension of synchronous statecharts. *ACM SIGPLAN Notices*, 49 (6):372–383, June 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

DAntoni:2014:FTB

[1635] Loris D'Antoni, Margus Veanes, Benjamin Livshits, and David Molnar. Fast: a transducer-based language for tree manipulation. *ACM SIGPLAN Notices*, 49(6):384–394, June 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Misra:2014:PPC

[1636] Jayadev Misra. A personal perspective on concurrency. *ACM SIGPLAN Notices*, 49(6):395, June 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Phothilimthana:2014:CSA

[1637] Phitchaya Mangpo Phothilimthana, Tikhon Jelvis, Rohin Shah, Nishant Totla, Sarah Chasins, and Rastislav Bodik. Chlorophyll: synthesis-aided compiler for low-power spatial architectures. *ACM SIGPLAN Notices*, 49 (6):396–407, June 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Perelman:2014:TDS

[1638] Daniel Perelman, Sumit Gulwani, Dan Grossman, and Peter Provost. Test-driven synthesis. *ACM SIGPLAN Notices*, 49(6):408–418, June 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Raychev:2014:CCS

[1639] Veselin Raychev, Martin Vechev, and Eran Yahav. Code completion with statistical language models. *ACM SIGPLAN Notices*, 49(6):419–428, June 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Greenaway:2014:DSS

[1640] David Greenaway, Japheth Lim, June Andronick, and Gerwin Klein. Don't sweat the small stuff: formal verification of C code without the pain. *ACM SIGPLAN Notices*, 49(6):429–439, June 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Pek:2014:NPD

[1641] Edgar Pek, Xiaokang Qiu, and P. Madhusudan. Natural proofs for data structure manipulation in C using separation logic. *ACM SIGPLAN Notices*, 49 (6):440–451, June 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Ricketts:2014:AFP

[1642] Daniel Ricketts, Valentin Robert, Dongseok Jang, Zachary Tatlock, and Sorin Lerner. Automating formal proofs for reactive systems. *ACM SIGPLAN Notices*, 49(6):452–462, June 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Xiao:2014:PPI

[1643] Xiao Xiao, Qirun Zhang, Jinguo Zhou, and Charles Zhang. Persistent pointer information. *ACM SIGPLAN Notices*, 49(6):463–474, June 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Oh:2014:SCS

[1644] Hakjoo Oh, Wonchan Lee, Kihong Heo, Hongseok Yang, and Kwangkeun Yi. Selective context-sensitivity guided by impact pre-analysis. *ACM SIGPLAN Notices*, 49(6):475–484, June 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Smaragdakis:2014:IAC

[1645] Yannis Smaragdakis, George Kastrinis, and George Balatsouras. Introspective analysis: context-sensitivity, across the board. *ACM SIGPLAN Notices*, 49 (6):485–495, June 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Ahn:2014:IJP

[1646] Wonsun Ahn, Jiho Choi, Thomas Shull, María J. Garzarán, and Josep Torrellas. Improving JavaScript performance by deconstructing the type system. *ACM SIGPLAN Notices*, 49 (6):496–507, June 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Vilk:2014:DBB

[1647] John Vilk and Emery D. Berger. Doppio: breaking the browser language barrier. *ACM SIGPLAN Notices*, 49 (6):508–518, June 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Lu:2014:DED

[1648] Li Lu, Weixing Ji, and Michael L. Scott. Dynamic enforcement of determinism in a parallel scripting language. *ACM SIGPLAN Notices*, 49 (6):519–529, June 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Torlak:2014:LSV

[1649] Emina Torlak and Rastislav Bodik. A lightweight symbolic virtual machine for solver-aided host languages. *ACM SIGPLAN Notices*, 49(6):530–541, June 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Le:2014:FFD

[1650] Vu Le and Sumit Gulwani. FlashExtract: a framework for data extraction by examples. *ACM SIGPLAN Notices*, 49(6):542–553, June 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Sousa:2014:CQU

[1651] Marcelo Sousa, Isil Dillig, Dimitrios Vytiniotis, Thomas Dillig, and Christos Gkantsidis. Consolidation of queries with user-defined functions. *ACM SIGPLAN Notices*, 49(6):554–564, June 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Luu:2014:MCC

[1652] Loi Luu, Shweta Shinde, Prateek Saxena, and Brian Demsky. A model counter for constraints over unbounded strings. *ACM SIGPLAN Notices*, 49 (6):565–576, June 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Niu:2014:MCF

[1653] Ben Niu and Gang Tan. Modular control-flow integrity. *ACM SIGPLAN Notices*, 49(6):577–587, June 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Yang:2014:DSL

[1654] Edward Z. Yang and David Mazières. Dynamic space limits for Haskell. *ACM SIGPLAN Notices*, 49(6):588–598, June 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Tsafrir:2014:ELV

[1655] Dan Tsafrir. Experiences in the land of virtual abstractions. *ACM SIGPLAN Notices*, 49(7):1–2, July 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Hizver:2014:RTD

[1656] Jennia Hizver and Tzi cker Chiueh. Real-time deep virtual machine introspection and its applications. *ACM SIGPLAN Notices*, 49(7):3–14, July 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Arya:2014:TRG

[1657] Kapil Arya, Yury Baskakov, and Alex Garthwaite. Tesseract: reconciling guest I/O and hypervisor swapping in a VM. *ACM SIGPLAN Notices*, 49

(7):15–28, July 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Kim:2014:VAM

[1658] Hwanju Kim, Sangwook Kim, Jinkyu Jeong, and Joonwon Lee. Virtual asymmetric multiprocessor for interactive performance of consolidated desktops. *ACM SIGPLAN Notices*, 49(7):29–40, July 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Ben-Yehuda:2014:GMD

[1659] Orna Agmon Ben-Yehuda, Eyal Posener, Muli Ben-Yehuda, Assaf Schuster, and Ahuva Mu'alem. Ginseng: market-driven memory allocation. *ACM SIGPLAN Notices*, 49 (7):41–52, July 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Hwang:2014:MFG

[1660] Jinho Hwang, Ahsen Uppal, Timothy Wood, and Howie Huang. Mortar: filling the gaps in data center memory. *ACM SIGPLAN Notices*, 49(7):53–64, July 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Chen:2014:CCB

[1661] Licheng Chen, Zhipeng Wei, Zehan Cui, Mingyu Chen, Haiyang Pan, and Yungang Bao. CMD: classification-based memory deduplication through page access characteristics. *ACM SIGPLAN Notices*, 49(7):65–76, July 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Robatmili:2014:MRL

[1662] Behnam Robatmili, Calin Cascaval, Mehrdad Reshadi, Madhukar N. Kedlaya, Seth Fowler, Vrajesh Bhavsar, Michael Weber, and Ben Hardekopf. MuscalietJS: rethinking layered dynamic web runtimes. *ACM SIGPLAN Notices*, 49(7):77–88, July 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Kalibera:2014:FAS

[1663] Tomas Kalibera, Petr Maj, Floreal Morandat, and Jan Vitek. A fast abstract syntax tree interpreter for R. *ACM SIGPLAN Notices*, 49(7):89–102, July 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Kedlaya:2014:DDL

[1664] Madhukar N. Kedlaya, Behnam Robatmili, Cglin Cascaval, and Ben Hardekopf. Deoptimization for dynamic language JITs on typed, stack-based virtual machines. *ACM SIGPLAN Notices*, 49(7):103–114, July 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Vitek:2014:CTR

[1665] Jan Vitek. The case for the three R's of systems research: repeatability, reproducibility and rigor. *ACM SIGPLAN Notices*, 49(7):115–116, July 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Chang:2014:EMV

[1666] Chao-Jui Chang, Jan-Jan Wu, Wei-Chung Hsu, Pangfeng Liu, and Pen-Chung Yew. Efficient memory virtualization for Cross-ISA system mode emulation. *ACM SIGPLAN Notices*, 49 (7):117–128, July 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Zhang:2014:PSS

[1667] Mingwei Zhang, Rui Qiao, Niranjan Hasabnis, and R. Sekar. A platform for secure static binary instrumentation. *ACM SIGPLAN Notices*, 49(7): 129–140, July 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Lyu:2014:DER

[1668] Yi-Hong Lyu, Ding-Yong Hong, Tai-Yi Wu, Jan-Jan Wu, Wei-Chung Hsu, Pangfeng Liu, and Pen-Chung Yew. DBILL: an efficient and retargetable dynamic binary instrumentation framework using LLVM backend. *ACM SIGPLAN Notices*, 49(7): 141–152, July 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Zheng:2014:CCM

[1669] Jie Zheng, Tze Sing Eugene Ng, Kunwadee Sripanidkulchai, and Zhaolei Liu. COMMA: coordinating the migration of multi-tier applications. *ACM SIGPLAN Notices*, 49(7):153–164, July 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Kumar:2014:FBE

[1670] Vivek Kumar, Stephen M. Blackburn, and David Grove. Friendly barriers: efficient work-stealing with return barriers. *ACM SIGPLAN Notices*, 49(7): 165–176, July 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Horie:2014:SDJ

[1671] Michihiro Horie, Kazunori Ogata, Kiyokuni Kawachiya, and Tamiya Onodera. String deduplication for Java-based middleware in virtualized environments. *ACM SIGPLAN Notices*, 49 (7):177–188, July 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Stecklina:2014:SHO

[1672] Julian Stecklina. Shrinking the hypervisor one subsystem at a time: a userspace packet switch for virtual machines. *ACM SIGPLAN Notices*, 49 (7):189–200, July 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Li:2014:VSK

[1673] Ye Li, Richard West, and Eric Missimer. A virtualized separation kernel for mixed criticality systems. *ACM SIGPLAN Notices*, 49(7):201–212, July 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Johnson:2014:CML

[1674] David Johnson, Mike Hibler, and Eric Eric. Composable multi-level debugging with Stackdb. *ACM SIGPLAN Notices*, 49(7):213–226, July

2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Hill:2014:CCA

[1675] Mark D. Hill. 21st century computer architecture. *ACM SIGPLAN Notices*, 49(8):1–2, August 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Liu:2014:PPF

[1676] Tongping Liu, Chen Tian, Ziang Hu, and Emery D. Berger. PREDATOR: predictive false sharing detection. *ACM SIGPLAN Notices*, 49(8):3–14, August 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Thomson:2014:CTU

[1677] Paul Thomson, Alastair F. Donaldson, and Adam Betts. Concurrency testing using schedule bounding: an empirical study. *ACM SIGPLAN Notices*, 49(8):15–28, August 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Samak:2014:TDD

[1678] Malavika Samak and Murali Krishna Ramanathan. Trace driven dynamic deadlock detection and reproduction. *ACM SIGPLAN Notices*, 49(8):29–42, August 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Chiang:2014:ESI

[1679] Wei-Fan Chiang, Ganesh Gopalakrishnan, Zvonimir Rakamaric, and Alexey Solovyev. Efficient search for inputs causing high floating-point errors. *ACM SIGPLAN Notices*, 49(8):43–52, August 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Tardieu:2014:XAP

[1680] Olivier Tardieu, Benjamin Herta, David Cunningham, David Grove, Prabhanjan Kambadur, Vijay Saraswat, Avraham Shinnar, Mikio Takeuchi, and Mandana Vaziri. X10 and APGAS at petascale. *ACM SIGPLAN Notices*, 49(8):53–66, August 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Cunningham:2014:RXE

[1681] David Cunningham, David Grove, Benjamin Herta, Arun Iyengar, Kiyokuni Kawachiya, Hiroki Murata, Vijay Saraswat, Mikio Takeuchi, and Olivier Tardieu. Resilient X10: efficient failure-aware programming. *ACM SIGPLAN Notices*, 49(8):67–80, August 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Yang:2014:PMI

[1682] Chaoran Yang, Wesley Bland, John Mellor-Crummey, and Pavan Balaji. Portable, MPI-interoperable Coarray Fortran. *ACM SIGPLAN Notices*, 49(8):81–92, August 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Yang:2014:CNR

[1683] Yi Yang and Huiyang Zhou. CUDA-NP: realizing nested thread-level parallelism in GPGPU applications. *ACM SIGPLAN Notices*, 49(8):93–106, August 2014. CODEN SINODQ. ISSN

0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Yan:2014:YYA

[1684] Shengen Yan, Chao Li, Yunquan Zhang, and Huiyang Zhou. yaSpMV: yet another SpMV framework on GPUs. *ACM SIGPLAN Notices*, 49(8): 107–118, August 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Bauer:2014:SLW

[1685] Michael Bauer, Sean Treichler, and Alex Aiken. Singe: leveraging warp specialization for high performance on GPUs. *ACM SIGPLAN Notices*, 49(8): 119–130, August 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Odaira:2014:EGI

[1686] Rei Odaira, Jose G. Castanos, and Hisanobu Tomari. Eliminating global interpreter locks in Ruby through hardware transactional memory. *ACM SIGPLAN Notices*, 49(8):131–142, August 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Petrovic:2014:LHM

[1687] Darko Petrović, Thomas Ropars, and André Schiper. Leveraging hardware message passing for efficient thread synchronization. *ACM SIGPLAN Notices*, 49(8):143–154, August 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Herlihy:2014:WSF

[1688] Maurice Herlihy and Zhiyu Liu. Well-structured futures and cache locality. *ACM SIGPLAN Notices*, 49(8): 155–166, August 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Diegues:2014:TWL

[1689] Nuno Diegues and Paolo Romano. Time-Warp: lightweight abort minimization in transactional memory. *ACM SIGPLAN Notices*, 49(8):167–178, August 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Olukotun:2014:BPP

[1690] Kunle Olukotun. Beyond parallel programming with domain specific languages. *ACM SIGPLAN Notices*, 49 (8):179–180, August 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Song:2014:DAT

[1691] Sukhyun Song and Jeffrey K. Hollingsworth. Designing and auto-tuning parallel 3-D FFT for computation-communication overlap. *ACM SIGPLAN Notices*, 49 (8):181–192, August 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Catanzaro:2014:DPM

[1692] Bryan Catanzaro, Alexander Keller, and Michael Garland. A decomposition for in-place matrix transposition. *ACM SIGPLAN Notices*, 49(8):193–206, August 2014. CODEN SINODQ. ISSN

0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Sung:2014:PTR

[1693] I-Jui Sung, Juan Gómez-Luna, José María González-Linares, Nicolás Guil, and Wen-Mei W. Hwu. In-place transposition of rectangular matrices on accelerators. *ACM SIGPLAN Notices*, 49(8): 207–218, August 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Maleki:2014:PDP

[1694] Saeed Maleki, Madanlal Musuvathi, and Todd Mytkowicz. Parallelizing dynamic programming through rank convergence. *ACM SIGPLAN Notices*, 49 (8):219–232, August 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Mehta:2014:RLF

[1695] Sanyam Mehta, Pei-Hung Lin, and Pen-Chung Yew. Revisiting loop fusion in the polyhedral framework. *ACM SIGPLAN Notices*, 49(8):233–246, August 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Rodrigues:2014:TPS

[1696] Christopher Rodrigues, Thomas Jablin, Abdul Dakkak, and Wen-Mei Hwu. Triolet: a programming system that unifies algorithmic skeleton interfaces for high-performance cluster computing. *ACM SIGPLAN Notices*, 49(8): 247–258, August 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Liu:2014:TAP

[1697] Xu Liu and John Mellor-Crummey. A tool to analyze the performance of multithreaded programs on NUMA architectures. *ACM SIGPLAN Notices*, 49 (8):259–272, August 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Rao:2014:TFE

[1698] Jia Rao and Xiaobo Zhou. Towards fair and efficient SMP virtual machine scheduling. *ACM SIGPLAN Notices*, 49(8):273–286, August 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Lu:2014:EDM

[1699] Kai Lu, Xu Zhou, Tom Bergan, and Xiaoping Wang. Efficient deterministic multithreading without global barriers. *ACM SIGPLAN Notices*, 49(8): 287–300, August 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Eslamimehr:2014:RDS

[1700] Mahdi Eslamimehr and Jens Palsberg. Race directed scheduling of concurrent programs. *ACM SIGPLAN Notices*, 49(8):301–314, August 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Rubin:2014:HCW

[1701] Norm Rubin. Heterogeneous computing: what does it mean for compiler research? *ACM SIGPLAN Notices*, 49(8):315–316, August 2014.

CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Natarajan:2014:FCL

[1702] Aravind Natarajan and Neeraj Mittal. Fast concurrent lock-free binary search trees. *ACM SIGPLAN Notices*, 49(8): 317–328, August 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Brown:2014:GTN

[1703] Trevor Brown, Faith Ellen, and Eric Ruppert. A general technique for non-blocking trees. *ACM SIGPLAN Notices*, 49(8):329–342, August 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Drachsler:2014:PCB

[1704] Dana Drachsler, Martin Vechev, and Eran Yahav. Practical concurrent binary search trees via logical ordering. *ACM SIGPLAN Notices*, 49(8): 343–356, August 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Timnat:2014:PWF

[1705] Shahar Timnat and Erez Petrank. A practical wait-free simulation for lock-free data structures. *ACM SIGPLAN Notices*, 49(8):357–368, August 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Pusukuri:2014:LCA

[1706] Kishore Kumar Pusukuri, Rajiv Gupta, and Laxmi Narayan Bhuyan. Lock contention aware thread migrations. *ACM SIGPLAN Notices*, 49(8): 369–370, August 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Lee:2014:IFL

[1707] Kyu Hyung Lee, Dohyeong Kim, and Xiangyu Zhang. Infrastructure-free logging and replay of concurrent execution on multiple cores. *ACM SIGPLAN Notices*, 49(8):371–372, August 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Aguston:2014:PHC

[1708] Cfir Aguston, Yosi Ben Asher, and Gadi Haber. Parallelization hints via code skeletonization. *ACM SIGPLAN Notices*, 49(8):373–374, August 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Wang:2014:CBL

[1709] Wenwen Wang, Chenggang Wu, Pen-Chung Yew, Xiang Yuan, Zhenjiang Wang, Jianjun Li, and Xiaobing Feng. Concurrency bug localization using shared memory access pairs. *ACM SIGPLAN Notices*, 49(8):375–376, August 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Leung:2014:TMS

[1710] Vitus J. Leung, David P. Bunde, Jonathan Ebbers, Stefan P. Feer, Nickolas W. Price, Zachary D. Rhodes, and Matthew Swank. Task mapping stencil computations for non-contiguous allocations. *ACM SIG-*

PLAN Notices, 49(8):377–378, August 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Wimmer:2014:DST

[1711] Martin Wimmer, Francesco Versaci, Jesper Larsson Träff, Daniel Cederman, and Philippas Tsigas. Data structures for task-based priority scheduling. *ACM SIGPLAN Notices*, 49(8): 379–380, August 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Gomez:2014:DSD

[1712] Leonardo Bautista Gomez and Franck Cappello. Detecting silent data corruption through data dynamic monitoring for scientific applications. *ACM SIGPLAN Notices*, 49(8):381–382, August 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Sandes:2014:FGP

[1713] Edans F. de O. Sandes, Guillermo Miranda, Alba C. M. A. Melo, Xavier Martorell, and Eduard Ayguade. Fine-grain parallel megabase sequence comparison with multiple heterogeneous GPUs. *ACM SIGPLAN Notices*, 49(8): 383–384, August 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Golan-Gueta:2014:ASL

[1714] Guy Golan-Gueta, G. Ramalingam, Mooly Sagiv, and Eran Yahav. Automatic semantic locking. *ACM SIGPLAN Notices*, 49(8):385–386, August 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Hassan:2014:OTB

[1715] Ahmed Hassan, Roberto Palmieri, and Binoy Ravindran. Optimistic transactional boosting. *ACM SIGPLAN Notices*, 49(8):387–388, August 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Agrawal:2014:PGS

[1716] Kunal Agrawal, Jeremy T. Fineman, Brendan Sheridan, Jim Sukha, and Robert Utterback. Provably good scheduling for parallel programs that use data structures through implicit batching. *ACM SIGPLAN Notices*, 49 (8):389–390, August 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Ma:2014:TAC

[1717] Lin Ma, Kunal Agrawal, and Roger D. Chamberlain. Theoretical analysis of classic algorithms on highly-threaded many-core GPUs. *ACM SIGPLAN Notices*, 49(8):391–392, August 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Tomkins:2014:SIP

[1718] Daniel Tomkins, Timmie Smith, Nancy M. Amato, and Lawrence Rauchwerger. SCCMulti: an improved parallel strongly connected components algorithm. *ACM SIGPLAN Notices*, 49(8):393–394, August 2014. CODEN SINODQ. ISSN 0362-1340 (print),

1523-2867 (print), 1558-1160 (electronic).

Luo:2014:ISM

[1719] Miao Luo, Xiaoyi Lu, Khaled Hamidouche, Krishna Kandalla, and Dhabaleswar K. Panda. Initial study of multi-endpoint runtime for MPI + OpenMP hybrid programming model on multi-core systems. *ACM SIGPLAN Notices*, 49(8):395–396, August 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Isaacs:2014:ELS

[1720] Katherine E. Isaacs, Todd Gamblin, Abhinav Bhatele, Peer-Timo Bremer, Martin Schulz, and Bernd Hamann. Extracting logical structure and identifying stragglers in parallel execution traces. *ACM SIGPLAN Notices*, 49(8): 397–398, August 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Fisher:2014:UFM

[1721] Kathleen Fisher. Using formal methods to enable more secure vehicles: DARPA's HACMS program. *ACM SIGPLAN Notices*, 49(9):1, September 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Hickey:2014:BES

[1722] Patrick C. Hickey, Lee Pike, Trevor Elliott, James Bielman, and John Launchbury. Building embedded systems with embedded DSLs. *ACM SIGPLAN Notices*, 49(9):3–9, September 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Schlesinger:2014:CNP

[1723] Cole Schlesinger, Michael Greenberg, and David Walker. Concurrent NetCore: from policies to pipelines. *ACM SIGPLAN Notices*, 49(9):11–24, September 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Schoepe:2014:STI

[1724] Daniel Schoepe, Daniel Hedin, and Andrei Sabelfeld. SeLINQ: tracking information across application-database boundaries. *ACM SIGPLAN Notices*, 49(9):25–38, September 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Chen:2014:TBP

[1725] Sheng Chen and Martin Erwig. Type-based parametric analysis of program families. *ACM SIGPLAN Notices*, 49 (9):39–51, September 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Stansifer:2014:RSM

[1726] Paul Stansifer and Mitchell Wand. Romeo: a system for more flexible binding-safe programming. *ACM SIGPLAN Notices*, 49(9):53–65, September 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Grabmayer:2014:MSL

[1727] Clemens Grabmayer and Jan Rochel. Maximal sharing in the Lambda cal-

culus with letrec. *ACM SIGPLAN Notices*, 49(9):67–80, September 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Bergstrom:2014:PEH

[1728] Lars Bergstrom, Matthew Fluet, Matthew Le, John Reppy, and Nora Sandler. Practical and effective higher-order optimizations. *ACM SIGPLAN Notices*, 49(9):81–93, September 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Hackett:2014:WWM

[1729] Jennifer Hackett and Graham Hutton. Worker/wrapper/makes it/faster. *ACM SIGPLAN Notices*, 49(9):95–107, September 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Downen:2014:CSC

[1730] Paul Downen and Zena M. Ariola. Compositional semantics for composable continuations: from abortive to delimited control. *ACM SIGPLAN Notices*, 49(9):109–122, September 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Petricek:2014:CCC

[1731] Tomas Petricek, Dominic Orchard, and Alan Mycroft. Coeffects: a calculus of context-dependent computation. *ACM SIGPLAN Notices*, 49(9):123–135, September 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Findler:2014:BSC

[1732] Robert Bruce Findler. Behavioral software contracts. *ACM SIGPLAN Notices*, 49(9):137–138, September 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Nguyen:2014:SCV

[1733] Phúc C. Nguyen, Sam Tobin-Hochstadt, and David Van Horn. Soft contract verification. *ACM SIGPLAN Notices*, 49(9):139–152, September 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Ramsey:2014:THD

[1734] Norman Ramsey. On teaching *how to design programs*: observations from a newcomer. *ACM SIGPLAN Notices*, 49(9):153–166, September 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Ohori:2014:SIP

[1735] Atsushi Ohori, Katsuhiro Ueno, Kazunori Hoshi, Shinji Nozaki, Takashi Sato, Tasuku Makabe, and Yuki Ito. SML# in industry: a practical ERP system development. *ACM SIGPLAN Notices*, 49(9):167–173, September 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Mulligan:2014:LRE

[1736] Dominic P. Mulligan, Scott Owens, Kathryn E. Gray, Tom Ridge, and Peter Sewell. Lem: reusable engineering of real-world semantics. *ACM SIG-*

PLAN Notices, 49(9):175–188, September 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Breitner:2014:SZC

[1737] Joachim Breitner, Richard A. Eisenberg, Simon Peyton Jones, and Stephanie Weirich. Safe zero-cost coercions for Haskell. *ACM SIGPLAN Notices*, 49(9):189–202, September 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Pottier:2014:HME

[1738] François Pottier. Hindley–Milner elaboration in applicative style: functional pearl. *ACM SIGPLAN Notices*, 49(9):203–212, September 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Winograd-Cort:2014:SNI

[1739] Daniel Winograd-Cort and Paul Hudak. Settable and non-interfering signal functions for FRP: how a first-order switch is more than enough. *ACM SIGPLAN Notices*, 49(9):213–225, September 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Chen:2014:FPD

[1740] Yan Chen, Umut A. Acar, and Kanat Tangwongsan. Functional programming for dynamic and large data with self-adjusting computation. *ACM SIGPLAN Notices*, 49(9):227–240, September 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Weirich:2014:DT

[1741] Stephanie Weirich. Depending on types. *ACM SIGPLAN Notices*, 49(9): 241, September 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Angiuli:2014:HPT

[1742] Carlo Angiuli, Edward Morehouse, Daniel R. Licata, and Robert Harper. Homotopical patch theory. *ACM SIGPLAN Notices*, 49(9):243–256, September 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Cockx:2014:PMK

[1743] Jesper Cockx, Dominique Devriese, and Frank Piessens. Pattern matching without K. *ACM SIGPLAN Notices*, 49(9):257–268, September 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Vazou:2014:RTH

[1744] Niki Vazou, Eric L. Seidel, Ranjit Jhala, Dimitrios Vytiniotis, and Simon Peyton-Jones. Refinement types for Haskell. *ACM SIGPLAN Notices*, 49(9):269–282, September 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Schwerter:2014:TGE

[1745] Felipe Bañados Schwerter, Ronald Garcia, and Éric Tanter. A theory of gradual effect systems. *ACM SIGPLAN Notices*, 49(9):283–295, September 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

McBride:2014:HKY

[1746] Conor Thomas McBride. How to keep your neighbours in order. *ACM SIGPLAN Notices*, 49(9):297–309, September 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Kaki:2014:RFH

[1747] Gowtham Kaki and Suresh Jagannathan. A relational framework for higher-order shape analysis. *ACM SIGPLAN Notices*, 49(9):311–324, September 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Marlow:2014:TNF

[1748] Simon Marlow, Louis Brandy, Jonathan Coens, and Jon Purdy. There is no fork: an abstraction for efficient, concurrent, and concise data access. *ACM SIGPLAN Notices*, 49(9):325–337, September 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Gibbons:2014:FDS

[1749] Jeremy Gibbons and Nicolas Wu. Folding domain-specific languages: deep and shallow embeddings (functional pearl). *ACM SIGPLAN Notices*, 49 (9):339–347, September 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Fredriksson:2014:KNS

[1750] Olle Fredriksson and Dan R. Ghica. Krivine nets: a semantic foundation for distributed execution. *ACM SIGPLAN Notices*, 49(9):349–361, September 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Accattoli:2014:DAM

[1751] Beniamino Accattoli, Pablo Barenbaum, and Damiano Mazza. Distilling abstract machines. *ACM SIGPLAN Notices*, 49(9):363–376, September 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Chong:2014:CCT

[1752] Stephen Chong. Checking correctness of TypeScript interfaces for JavaScript libraries. *ACM SIGPLAN Notices*, 49 (10):1–16, October 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Andreasen:2014:DSA

[1753] Esben Andreasen and Anders Møller. Determinacy in static analysis for jQuery. *ACM SIGPLAN Notices*, 49 (10):17–31, October 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Pradel:2014:EAR

[1754] Michael Pradel, Parker Schuh, George Necula, and Koushik Sen. EventBreak: analyzing the responsiveness of user interfaces through performance-guided test generation. *ACM SIGPLAN Notices*, 49(10):33–47, October 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Hsiao:2014:UWC

[1755] Chun-Hung Hsiao, Michael Cafarella, and Satish Narayanasamy. Using web

corpus statistics for program analysis. *ACM SIGPLAN Notices*, 49(10): 49–65, October 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Barr:2014:TAT

[1756] Earl T. Barr and Mark Marron. Tardis: affordable time-travel debugging in managed runtimes. *ACM SIGPLAN Notices*, 49(10):67–82, October 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Bell:2014:PID

[1757] Jonathan Bell and Gail Kaiser. Phosphor: illuminating dynamic data flow in commodity JVMs. *ACM SIGPLAN Notices*, 49(10):83–101, October 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Pina:2014:RDJ

[1758] Luís Pina, Luís Veiga, and Michael Hicks. Rubah: DSU for Java on a stock JVM. *ACM SIGPLAN Notices*, 49(10): 103–119, October 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Shahriyar:2014:FCG

[1759] Rifat Shahriyar, Stephen M. Blackburn, and Kathryn S. McKinley. Fast conservative garbage collection. *ACM SIGPLAN Notices*, 49(10):121–139, October 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Holk:2014:RBM

[1760] Eric Holk, Ryan Newton, Jeremy Siek, and Andrew Lumsdaine. Region-based memory management for GPU programming languages: enabling rich data structures on a spartan host. *ACM SIGPLAN Notices*, 49(10):141–155, October 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Uhler:2014:SSB

[1761] Richard Uhler and Nirav Dave. Smten with satisfiability-based search. *ACM SIGPLAN Notices*, 49(10):157–176, October 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Bosboom:2014:SCC

[1762] Jeffrey Bosboom, Sumanaruban Rajadurai, Weng-Fai Wong, and Saman Amarasinghe. StreamJIT: a commensal compiler for high-performance stream programming. *ACM SIGPLAN Notices*, 49(10):177–195, October 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Tosch:2014:SPA

[1763] Emma Tosch and Emery D. Berger. SurveyMan: programming and automatically debugging surveys. *ACM SIGPLAN Notices*, 49(10):197–211, October 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Bartenstein:2014:RTS

[1764] Thomas W. Bartenstein and Yu David Liu. Rate types for stream programs.

ACM SIGPLAN Notices, 49(10):213–232, October 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Amin:2014:FPD

[1765] Nada Amin, Tiark Rompf, and Martin Odersky. Foundations of path-dependent types. *ACM SIGPLAN Notices*, 49(10):233–249, October 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Allende:2014:CGT

[1766] Esteban Allende, Johan Fabry, Ronald Garcia, and Éric Tanter. Confined gradual typing. *ACM SIGPLAN Notices*, 49(10):251–270, October 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Altidor:2014:RJG

[1767] John Altidor and Yannis Smaragdakis. Refactoring Java generics by inferring wildcards, in practice. *ACM SIGPLAN Notices*, 49(10):271–290, October 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

David:2014:CMC

[1768] Florian David, Gael Thomas, Julia Lawall, and Gilles Muller. Continuously measuring critical section pressure with the free-lunch profiler. *ACM SIGPLAN Notices*, 49(10):291–307, October 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Misailovic:2014:CRA

[1769] Sasa Misailovic, Michael Carbin, Sara Achour, Zichao Qi, and Martin C. Rinard. Chisel: reliability- and accuracy-aware optimization of approximate computational kernels. *ACM SIGPLAN Notices*, 49(10):309–328, October 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Kambadur:2014:ESE

[1770] Melanie Kambadur and Martha A. Kim. An experimental survey of energy management across the stack. *ACM SIGPLAN Notices*, 49(10):329–344, October 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Pinto:2014:UEB

[1771] Gustavo Pinto, Fernando Castor, and Yu David Liu. Understanding energy behaviors of thread management constructs. *ACM SIGPLAN Notices*, 49 (10):345–360, October 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Drechsler:2014:DRU

[1772] Joscha Drechsler, Guido Salvaneschi, Ragnar Mogk, and Mira Mezini. Distributed REScala: an update algorithm for distributed reactive programming. *ACM SIGPLAN Notices*, 49(10): 361–376, October 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Rendel:2014:OAA

[1773] Tillmann Rendel, Jonathan Immanuel Brachthäuser, and Klaus Ostermann.

From object algebras to attribute grammars. *ACM SIGPLAN Notices*, 49 (10):377–395, October 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Ureche:2014:LDL

[1774] Vlad Ureche, Eugene Burmako, and Martin Odersky. Late data layout: unifying data representation transformations. *ACM SIGPLAN Notices*, 49(10): 397–416, October 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Mitschke:2014:ILI

[1775] Ralf Mitschke, Sebastian Erdweg, Mirko Köhler, Mira Mezini, and Guido Salvaneschi. i3QL: language-integrated live data views. *ACM SIGPLAN Notices*, 49(10):417–432, October 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Chakrabarti:2014:ALL

[1776] Dhruva R. Chakrabarti, Hans-J. Boehm, and Kumud Bhandari. Atlas: leveraging locks for non-volatile memory consistency. *ACM SIGPLAN Notices*, 49(10):433–452, October 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Steele:2014:FSP

[1777] Guy L. Steele, Jr., Doug Lea, and Christine H. Flood. Fast splittable pseudorandom number generators. *ACM SIGPLAN Notices*, 49(10): 453–472, October 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Samak:2014:MTS

[1778] Malavika Samak and Murali Krishna Ramanathan. Multithreaded test synthesis for deadlock detection. *ACM SIGPLAN Notices*, 49(10):473–489, October 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Bergan:2014:SEM

[1779] Tom Bergan, Dan Grossman, and Luis Ceze. Symbolic execution of multithreaded programs from arbitrary program contexts. *ACM SIGPLAN Notices*, 49(10):491–506, October 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Barowy:2014:CDD

[1780] Daniel W. Barowy, Dimitar Gochev, and Emery D. Berger. CheckCell: data debugging for spreadsheets. *ACM SIGPLAN Notices*, 49(10):507–523, October 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Pavlinovic:2014:FMT

[1781] Zvonimir Pavlinovic, Tim King, and Thomas Wies. Finding minimum type error sources. *ACM SIGPLAN Notices*, 49(10):525–542, October 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Liu:2014:FFL

[1782] Peng Liu, Omer Tripp, and Xiangyu Zhang. Flint: fixing linearizabil-

ity violations. *ACM SIGPLAN Notices*, 49(10):543–560, October 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Song:2014:SDR

[1783] Linhai Song and Shan Lu. Statistical debugging for real-world performance problems. *ACM SIGPLAN Notices*, 49(10):561–578, October 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Parr:2014:ALP

[1784] Terence Parr, Sam Harwell, and Kathleen Fisher. Adaptive LL(*) parsing: the power of dynamic analysis. *ACM SIGPLAN Notices*, 49(10):579–598, October 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Gligoric:2014:AMB

[1785] Milos Gligoric, Wolfram Schulte, Chandra Prasad, Danny van Velzen, Iman Narasamdya, and Benjamin Livshits. Automated migration of build scripts using dynamic analysis and search-based refactoring. *ACM SIGPLAN Notices*, 49(10):599–616, October 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Kumar:2014:MCM

[1786] Vineet Kumar and Laurie Hendren. MIX10: compiling MATLAB to X10 for high performance. *ACM SIGPLAN Notices*, 49(10):617–636, October 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Jonnalagedda:2014:SPC

[1787] Manohar Jonnalagedda, Thierry Coppey, Sandro Stucki, Tiark Rompf, and Martin Odersky. Staged parser combinators for efficient data processing. *ACM SIGPLAN Notices*, 49(10):637–653, October 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Rosner:2014:BET

[1788] Nicolás Rosner, Valeria Bengolea, Pablo Ponzio, Shadi Abdul Khalek, Nazareno Aguirre, Marcelo F. Frias, and Sarfraz Khurshid. Bounded exhaustive test input generation from hybrid invariants. *ACM SIGPLAN Notices*, 49(10):655–674, October 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Wang:2014:CVM

[1789] Peng Wang, Santiago Cuellar, and Adam Chlipala. Compiler verification meets cross-language linking via data abstraction. *ACM SIGPLAN Notices*, 49(10):675–690, October 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Turon:2014:GNW

[1790] Aaron Turon, Viktor Vafeiadis, and Derek Dreyer. GPS: navigating weak memory with ghosts, protocols, and separation. *ACM SIGPLAN Notices*, 49(10):691–707, October 2014. CODEN SINODQ. ISSN 0362-1340

(print), 1523-2867 (print), 1558-1160 (electronic).

Desai:2014:NPA

[1791] Ankush Desai, Pranav Garg, and P. Madhusudan. Natural proofs for asynchronous programs using almost-synchronous reductions. *ACM SIGPLAN Notices*, 49(10):709–725, October 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Zhang:2014:AIO

[1792] Wei Zhang, Per Larsen, Stefan Brunthaler, and Michael Franz. Accelerating iterators in optimizing AST interpreters. *ACM SIGPLAN Notices*, 49(10):727–743, October 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Zhao:2014:CSP

[1793] Zhijia Zhao, Bo Wu, Mingzhou Zhou, Yufei Ding, Jianhua Sun, Xipeng Shen, and Youfeng Wu. Call sequence prediction through probabilistic calling automata. *ACM SIGPLAN Notices*, 49(10):745–762, October 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Zhou:2014:SEM

[1794] Mingzhou Zhou, Xipeng Shen, Yaoqing Gao, and Graham Yiu. Space-efficient multi-versioning for input-adaptive feedback-driven program optimizations. *ACM SIGPLAN Notices*, 49(10):763–776, October 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Adams:2014:HVM

[1795] Keith Adams, Jason Evans, Bertrand Maher, Guilherme Ottoni, Andrew Paroski, Brett Simmers, Edwin Smith, and Owen Yamauchi. The HipHop Virtual Machine. *ACM SIGPLAN Notices*, 49(10):777–790, October 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Nazare:2014:VMA

[1796] Henrique Nazaré, Izabela Maffra, Willer Santos, Leonardo Barbosa, Laure Gonnord, and Fernando Magno Quintão Pereira. Validation of memory accesses through symbolic analyses. *ACM SIGPLAN Notices*, 49(10):791–809, October 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Partush:2014:ASD

[1797] Nimrod Partush and Eran Yahav. Abstract semantic differencing via speculative correlation. *ACM SIGPLAN Notices*, 49(10):811–828, October 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Zhang:2014:ESA

[1798] Qirun Zhang, Xiao Xiao, Charles Zhang, Hao Yuan, and Zhendong Su. Efficient subcubic alias analysis for C. *ACM SIGPLAN Notices*, 49(10):829–845, October 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Brutschy:2014:SAI

[1799] Lucas Brutschy, Pietro Ferrara, and Peter Müller. Static analysis for independent app developers. *ACM SIGPLAN Notices*, 49(10):847–860, October 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Vora:2014:AEA

[1800] Keval Vora, Sai Charan Koduru, and Rajiv Gupta. ASPIRE: exploiting asynchronous parallelism in iterative algorithms using a relaxed consistency based DSM. *ACM SIGPLAN Notices*, 49(10):861–878, October 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Holt:2014:AAL

[1801] Brandon Holt, Preston Briggs, Luis Ceze, and Mark Oskin. Alembic: automatic locality extraction via migration. *ACM SIGPLAN Notices*, 49(10): 879–894, October 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Xiao:2014:CPL

[1802] Tian Xiao, Zhenyu Guo, Hucheng Zhou, Jiaxing Zhang, Xu Zhao, Chencheng Ye, Xi Wang, Wei Lin, Wenguang Chen, and Lidong Zhou. Cybertron: pushing the limit on I/O reduction in data-parallel programs. *ACM SIGPLAN Notices*, 49(10):895–908, October 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Radoi:2014:TIC

[1803] Cosmin Radoi, Stephen J. Fink, Rodric Rabbah, and Manu Sridharan. Translating imperative code to MapReduce. *ACM SIGPLAN Notices*, 49(10):909–927, October 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Guyer:2014:UJT

[1804] Samuel Z. Guyer. Use of the JVM at twitter: a bird's eye view. *ACM SIGPLAN Notices*, 49(11):1, November 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Terei:2014:MHP

[1805] David Terei, Alex Aiken, and Jan Vitek. M^3: high-performance memory management from off-the-shelf components. *ACM SIGPLAN Notices*, 49 (11):3–13, November 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Clifford:2014:AFB

[1806] Daniel Clifford, Hannes Payer, Michael Starzinger, and Ben L. Titzer. Allocation folding based on dominance. *ACM SIGPLAN Notices*, 49(11):15–24, November 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Ratnakar:2014:PPC

[1807] Bollu Ratnakar and Rupesh Nasre. Push-pull constraint graph for efficient points-to analysis. *ACM SIGPLAN Notices*, 49(11):25–33, November 2014. CODEN SINODQ. ISSN 0362-1340

(print), 1523-2867 (print), 1558-1160 (electronic).

Joisha:2014:STF

[1808] Pramod G. Joisha. Sticky tries: fast insertions, fast lookups, no deletions for large key universes. *ACM SIGPLAN Notices*, 49(11):35–46, November 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Brandt:2014:CPG

[1809] Steven R. Brandt, Hari Krishnan, Gokarna Sharma, and Costas Busch. Concurrent, parallel garbage collection in linear time. *ACM SIGPLAN Notices*, 49(11):47–58, November 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Ugawa:2014:ROP

[1810] Tomoharu Ugawa, Richard E. Jones, and Carl G. Ritson. Reference object processing in on-the-fly garbage collection. *ACM SIGPLAN Notices*, 49(11): 59–69, November 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Li:2014:MHD

[1811] Pengcheng Li, Chen Ding, and Hao Luo. Modeling heap data growth using average liveness. *ACM SIGPLAN Notices*, 49(11):71–82, November 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Zakkak:2014:JJM

[1812] Foivos S. Zakkak and Polyvios Pratikakis. JDMM: a Java memory model for non-cache-coherent memory architectures. *ACM SIGPLAN Notices*, 49(11):83–92, November 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Egielski:2014:MAM

[1813] Ian J. Egielski, Jesse Huang, and Eddy Z. Zhang. Massive atomics for massive parallelism on GPUs. *ACM SIGPLAN Notices*, 49(11):93–103, November 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Ritson:2014:EGC

[1814] Carl G. Ritson, Tomoharu Ugawa, and Richard E. Jones. Exploring garbage collection with Haswell hardware transactional memory. *ACM SIGPLAN Notices*, 49(11):105–115, November 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Bacon:2014:PRT

[1815] David F. Bacon, Perry Cheng, and Sunil Shukla. Parallel real-time garbage collection of multiple heaps in reconfigurable hardware. *ACM SIGPLAN Notices*, 49(11):117–127, November 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Wu:2014:EHS

[1816] Nicolas Wu, Tom Schrijvers, and Ralf Hinze. Effect handlers in scope. *ACM SIGPLAN Notices*, 49(12):1–12, December 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Orchard:2014:EES

[1817] Dominic Orchard and Tomas Petricek. Embedding effect systems in Haskell. *ACM SIGPLAN Notices*, 49(12):13–24, December 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Blanchette:2014:ERN

[1818] Jasmin Christian Blanchette, Lars Hupel, Tobias Nipkow, Lars Noschinski, and Dmitriy Traytel. Experience report: the next 1100 Haskell programmers. *ACM SIGPLAN Notices*, 49(12):25–30, December 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Muranushi:2014:ERT

[1819] Takayuki Muranushi and Richard A. Eisenberg. Experience report: type-checking polymorphic units for astrophysics research in Haskell. *ACM SIGPLAN Notices*, 49(12):31–38, December 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Vazou:2014:LER

[1820] Niki Vazou, Eric L. Seidel, and Ranjit Jhala. LiquidHaskell: experience with refinement types in the real world. *ACM SIGPLAN Notices*, 49(12):39–51, December 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Pike:2014:SAE

[1821] Lee Pike. SmartCheck: automatic and efficient counterexample reduction and generalization. *ACM SIGPLAN Notices*, 49(12):53–64, December 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Maier:2014:HDS

[1822] Patrick Maier, Robert Stewart, and Phil Trinder. The HdpH DSLs for scalable reliable computation. *ACM SIGPLAN Notices*, 49(12):65–76, December 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Okabe:2014:SDW

[1823] Kiwamu Okabe and Takayuki Muranushi. Systems demonstration: writing NetBSD sound drivers in Haskell. *ACM SIGPLAN Notices*, 49(12):77–78, December 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Ekblad:2014:SCC

[1824] Anton Ekblad and Koen Claessen. A seamless, client-centric programming model for type safe web applications. *ACM SIGPLAN Notices*, 49(12):79–89, December 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Levy:2014:DPM

[1825] Amit A. Levy, David Terei, Deian Stefan, and David Maziéres. Demo proposal: making web applications — XSafe. *ACM SIGPLAN Notices*, 49(12):91, December 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Stefan:2014:BSS

[1826] Deian Stefan, Amit Levy, Alejandro Russo, and David Maziéres. Building

secure systems with LIO (demo). *ACM SIGPLAN Notices*, 49(12):93–94, December 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Eisenberg:2014:PFT

[1827] Richard A. Eisenberg and Jan Stolarek. Promoting functions to type families in Haskell. *ACM SIGPLAN Notices*, 49(12):95–106, December 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Morris:2014:SSH

[1828] J. Garrett Morris. A simple semantics for Haskell overloading. *ACM SIGPLAN Notices*, 49(12):107–118, December 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Chakravarty:2014:FIC

[1829] Manuel M. T. Chakravarty. Foreign inline code: systems demonstration. *ACM SIGPLAN Notices*, 49(12):119–120, December 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Adams:2014:ISP

[1830] Michael D. Adams and Ömer S. Agacan. Indentation-sensitive parsing for Parsec. *ACM SIGPLAN Notices*, 49 (12):121–132, December 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

vanderPloeg:2014:RRR

[1831] Atze van der Ploeg and Oleg Kiselyov. Reflection without remorse: revealing a hidden sequence to speed up monadic reflection. *ACM SIGPLAN Notices*, 49(12):133–144, December 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Rajamani:2015:ART

[1832] Sriram Rajamani. Automating repetitive tasks for the masses. *ACM SIGPLAN Notices*, 50(1):1–2, January 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Mellies:2015:FTR

[1833] Paul-André Melliès and Noam Zeilberger. Functors are type refinement systems. *ACM SIGPLAN Notices*, 50 (1):3–16, January 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Krishnaswami:2015:ILD

[1834] Neelakantan R. Krishnaswami, Pierre Pradic, and Nick Benton. Integrating linear and dependent types. *ACM SIGPLAN Notices*, 50(1):17–30, January 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Sojakova:2015:HIT

[1835] Kristina Sojakova. Higher inductive types as homotopy-initial algebras. *ACM SIGPLAN Notices*, 50(1):31–42, January 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Ngo:2015:RES

[1836] Minh Ngo, Fabio Massacci, Dimiter Milushev, and Frank Piessens. Run-

time enforcement of security policies on black box reactive programs. *ACM SIGPLAN Notices*, 50(1):43–54, January 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Barthe:2015:HOA

[1837] Gilles Barthe, Marco Gaboardi, Emilio Jesús Gallego Arias, Justin Hsu, Aaron Roth, and Pierre-Yves Strub. Higher-order approximate relational refinement types for mechanism design and differential privacy. *ACM SIGPLAN Notices*, 50(1):55–68, January 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Ebadi:2015:DPN

[1838] Hamid Ebadi, David Sands, and Gerardo Schneider. Differential privacy: Now it's getting personal. *ACM SIGPLAN Notices*, 50(1):69–81, January 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Tang:2015:SBC

[1839] Hao Tang, Xiaoyin Wang, Lingming Zhang, Bing Xie, Lu Zhang, and Hong Mei. Summary-based context-sensitive data-dependence analysis in presence of callbacks. *ACM SIGPLAN Notices*, 50 (1):83–95, January 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Chatterjee:2015:FAA

[1840] Krishnendu Chatterjee, Rasmus Ibsen-Jensen, Andreas Pavlogiannis, and Prateesh Goyal. Faster algorithms for algebraic path properties in recursive state machines with constant treewidth. *ACM SIGPLAN Notices*, 50(1):97–109, January 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Raychev:2015:PPP

[1841] Veselin Raychev, Martin Vechev, and Andreas Krause. Predicting program properties from "Big Code". *ACM SIGPLAN Notices*, 50(1):111–124, January 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Alur:2015:DDL

[1842] Rajeev Alur, Loris D'Antoni, and Mukund Raghothaman. DReX: a declarative language for efficiently evaluating regular string transformations. *ACM SIGPLAN Notices*, 50(1):125–137, January 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Veanes:2015:DPS

[1843] Margus Veanes, Todd Mytkowicz, David Molnar, and Benjamin Livshits. Data-parallel string-manipulating programs. *ACM SIGPLAN Notices*, 50(1): 139–152, January 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Chlipala:2015:UWS

[1844] Adam Chlipala. Ur/Web: a simple model for programming the Web. *ACM SIGPLAN Notices*, 50(1):153–165, January 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Rastogi:2015:SEG

[1845] Aseem Rastogi, Nikhil Swamy, Cédric Fournet, Gavin Bierman, and Panagiotis Vekris. Safe & efficient gradual typing for TypeScript. *ACM SIGPLAN Notices*, 50(1):167–180, January 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Greenberg:2015:SEM

[1846] Michael Greenberg. Space-efficient manifest contracts. *ACM SIGPLAN Notices*, 50(1):181–194, January 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Sekiyama:2015:MCD

[1847] Taro Sekiyama, Yuki Nishida, and Atsushi Igarashi. Manifest contracts for datatypes. *ACM SIGPLAN Notices*, 50(1):195–207, January 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Vafeiadis:2015:CCO

[1848] Viktor Vafeiadis, Thibaut Balabonski, Soham Chakraborty, Robin Morisset, and Francesco Zappa Nardelli. Common compiler optimisations are invalid in the C11 memory model and what we can do about it. *ACM SIGPLAN Notices*, 50(1):209–220, January 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Lange:2015:CMG

[1849] Julien Lange, Emilio Tuosto, and Nobuko Yoshida. From communicating machines to graphical choreographies. *ACM SIGPLAN Notices*, 50(1): 221–232, January 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Dodds:2015:SCT

[1850] Mike Dodds, Andreas Haas, and Christoph M. Kirsch. A scalable, correct time-stamped stack. *ACM SIGPLAN Notices*, 50(1):233–246, January 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Jourdan:2015:FVC

[1851] Jacques-Henri Jourdan, Vincent Laporte, Sandrine Blazy, Xavier Leroy, and David Pichardie. A formally-verified C static analyzer. *ACM SIGPLAN Notices*, 50(1):247–259, January 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Giacobazzi:2015:APA

[1852] Roberto Giacobazzi, Francesco Logozzo, and Francesco Ranzato. Analyzing program analyses. *ACM SIGPLAN Notices*, 50(1):261–273, January 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Stewart:2015:CC

[1853] Gordon Stewart, Lennart Beringer, Santiago Cuellar, and Andrew W. Appel. Compositional CompCert. *ACM SIGPLAN Notices*, 50(1):275–287, January 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Castagna:2015:PFS

[1854] Giuseppe Castagna, Kim Nguyen, Zhiwu Xu, and Pietro Abate. Polymorphic functions with set-theoretic types: Part 2: Local type inference and type reconstruction. *ACM SIGPLAN Notices*, 50(1):289–302, January 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Garcia:2015:PTS

[1855] Ronald Garcia and Matteo Cimini. Principal type schemes for gradual programs. *ACM SIGPLAN Notices*, 50(1): 303–315, January 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Lourenco:2015:DIF

[1856] Luísa Lourenço and Luís Caires. Dependent information flow types. *ACM SIGPLAN Notices*, 50(1):317–328, January 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Preda:2015:ASA

[1857] Mila Dalla Preda, Roberto Giacobazzi, Arun Lakhotia, and Isabella Mastroeni. Abstract symbolic automata: Mixed syntactic/semantic similarity analysis of executables. *ACM SIGPLAN Notices*, 50(1):329–341, January 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Foster:2015:CDP

[1858] Nate Foster, Dexter Kozen, Matthew Milano, Alexandra Silva, and Laure Thompson. A coalgebraic decision procedure for NetKAT. *ACM SIGPLAN Notices*, 50(1):343–355, January 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Pous:2015:SAL

[1859] Damien Pous. Symbolic algorithms for language equivalence and Kleene algebra with tests. *ACM SIGPLAN Notices*, 50(1):357–368, January 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Sjoberg:2015:PC

[1860] Vilhelm Sjöberg and Stephanie Weirich. Programming up to congruence. *ACM SIGPLAN Notices*, 50(1):369–382, January 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Tobisawa:2015:MLC

[1861] Kazunori Tobisawa. A meta lambda calculus with cross-level computation. *ACM SIGPLAN Notices*, 50(1):383–393, January 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Staton:2015:AEL

[1862] Sam Staton. Algebraic effects, linearity, and quantum programming languages. *ACM SIGPLAN Notices*, 50(1):395–406, January 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Farzan:2015:PSU

[1863] Azadeh Farzan, Zachary Kincaid, and Andreas Podelski. Proof spaces for un-

bounded parallelism. *ACM SIGPLAN Notices*, 50(1):407–420, January 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Sangiorgi:2015:ECU

[1864] Davide Sangiorgi. Equations, contractions, and unique solutions. *ACM SIGPLAN Notices*, 50(1):421–432, January 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Gupta:2015:SRC

[1865] Ashutosh Gupta, Thomas A. Henzinger, Arjun Radhakrishna, Roopsha Samanta, and Thorsten Tarrach. Succinct representation of concurrent trace sets. *ACM SIGPLAN Notices*, 50(1): 433–444, January 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Bogdanas:2015:KJC

[1866] Denis Bogdanas and Grigore Rosu. K-Java: a complete semantics of Java. *ACM SIGPLAN Notices*, 50(1):445–456, January 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Adams:2015:TEH

[1867] Michael D. Adams. Towards the essence of hygiene. *ACM SIGPLAN Notices*, 50(1):457–469, January 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Brown:2015:SRG

[1868] Matt Brown and Jens Palsberg. Self-representation in Girard's System U. *ACM SIGPLAN Notices*, 50(1):471–484, January 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Lee:2015:CEE

[1869] Peter Lee. Coding by everyone, every day. *ACM SIGPLAN Notices*, 50 (1):485, January 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Buneman:2015:DPT

[1870] Peter Buneman. Databases and programming: Two subjects divided by a common language? *ACM SIGPLAN Notices*, 50(1):487, January 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Fioriti:2015:PTS

[1871] Luis María Ferrer Fioriti and Holger Hermanns. Probabilistic termination: Soundness, completeness, and compositionality. *ACM SIGPLAN Notices*, 50(1):489–501, January 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

He:2015:LWA

[1872] Fei He, Xiaowei Gao, Bow-Yaw Wang, and Lijun Zhang. Leveraging weighted automata in compositional reasoning about concurrent probabilistic systems. *ACM SIGPLAN Notices*, 50(1):503–514, January 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Bonchi:2015:FAS

[1873] Filippo Bonchi, Pawel Sobocinski, and Fabio Zanasi. Full abstraction for signal flow graphs. *ACM SIGPLAN Notices*, 50(1):515–526, January 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Hinze:2015:CHM

[1874] Ralf Hinze, Nicolas Wu, and Jeremy Gibbons. Conjugate hylomorphisms — or: The mother of all structured recursion schemes. *ACM SIGPLAN Notices*, 50(1):527–538, January 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Chatterjee:2015:QIA

[1875] Krishnendu Chatterjee, Andreas Pavlogiannis, and Yaron Velner. Quantitative interprocedural analysis. *ACM SIGPLAN Notices*, 50(1):539–551, January 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Bastani:2015:SIU

[1876] Osbert Bastani, Saswat Anand, and Alex Aiken. Specification inference using context-free language reachability. *ACM SIGPLAN Notices*, 50(1): 553–566, January 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Elango:2015:CDA

[1877] Venmugil Elango, Fabrice Rastello, Louis-Noël Pouchet, J. Ramanujam, and P. Sadayappan. On characterizing the data access complexity of programs. *ACM SIGPLAN Notices*, 50(1): 567–580, January 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Agten:2015:SMV

[1878] Pieter Agten, Bart Jacobs, and Frank Piessens. Sound modular verification of C code executing in an unverified context. *ACM SIGPLAN Notices*, 50(1): 581–594, January 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Gu:2015:DSC

[1879] Ronghui Gu, Jérémie Koenig, Tahina Ramananandro, Zhong Shao, Xiongnan (Newman) Wu, Shu-Chun Weng, Haozhong Zhang, and Yu Guo. Deep specifications and certified abstraction layers. *ACM SIGPLAN Notices*, 50(1): 595–608, January 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Chlipala:2015:NIM

[1880] Adam Chlipala. From network interface to multithreaded Web applications: a case study in modular program verification. *ACM SIGPLAN Notices*, 50(1):609–622, January 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Crary:2015:CRM

[1881] Karl Crary and Michael J. Sullivan. A calculus for relaxed memory. *ACM SIGPLAN Notices*, 50(1):623–636, January 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Jung:2015:IMI

[1882] Ralf Jung, David Swasey, Filip Sieczkowski, Kasper Svendsen, Aaron Turon, Lars Birkedal, and Derek Dreyer. Iris: Monoids and invariants as an orthogonal basis for concurrent reasoning. *ACM SIGPLAN Notices*, 50(1): 637–650, January 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Bouajjani:2015:TRC

[1883] Ahmed Bouajjani, Michael Emmi, Constantin Enea, and Jad Hamza. Tractable refinement checking for concurrent objects. *ACM SIGPLAN Notices*, 50(1):651–662, January 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Padon:2015:DSP

[1884] Oded Padon, Neil Immerman, Aleksandr Karbyshev, Ori Lahav, Mooly Sagiv, and Sharon Shoham. Decentralizing SDN policies. *ACM SIGPLAN Notices*, 50(1):663–676, January 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Cochran:2015:PBP

[1885] Robert A. Cochran, Loris D'Antoni, Benjamin Livshits, David Molnar, and Margus Veanes. Program boosting: Program synthesis via crowd-sourcing. *ACM SIGPLAN Notices*, 50(1):677–688, January 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Delaware:2015:FDS

[1886] Benjamin Delaware, Clément Pit-Claudel, Jason Gross, and Adam Chlipala. Fiat: Deductive synthesis of abstract data types in a proof assistant. *ACM SIGPLAN Notices*, 50(1): 689–700, January 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Hanenberg:2015:WDW

[1887] Stefan Hanenberg. Why do we know so little about programming languages, and what would have happened if we had known more? *ACM SIGPLAN Notices*, 50(2):1, February 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Neto:2015:SOS

[1888] Lourival Vieira Neto, Roberto Ierusalimschy, Ana Lúcia de Moura, and Marc Balmer. Scriptable operating systems with Lua. *ACM SIGPLAN Notices*, 50 (2):2–10, February 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Johnson:2015:AAC

[1889] James Ian Johnson and David Van Horn. Abstracting abstract control. *ACM SIGPLAN Notices*, 50(2):11–22, February 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Strickland:2015:CDS

[1890] T. Stephen Strickland, Brianna M. Ren, and Jeffrey S. Foster. Contracts for domain-specific languages in Ruby. *ACM SIGPLAN Notices*, 50(2):

23–34, February 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Disney:2015:SYJ

[1891] Tim Disney, Nathan Faubion, David Herman, and Cormac Flanagan. Sweeten your JavaScript: hygienic macros for ES5. *ACM SIGPLAN Notices*, 50(2):35–44, February 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Vitousek:2015:DEG

[1892] Michael M. Vitousek, Andrew M. Kent, Jeremy G. Siek, and Jim Baker. Design and evaluation of gradual typing for Python. *ACM SIGPLAN Notices*, 50(2):45–56, February 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Freudenberg:2015:SMP

[1893] Bert Freudenberg, Dan H. H. Ingalls, Tim Felgentreff, Tobias Pape, and Robert Hirschfeld. SqueakJS: a modern and practical smalltalk that runs in any browser. *ACM SIGPLAN Notices*, 50(2):57–66, February 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Aigner:2015:AJE

[1894] Martin Aigner, Thomas Hütter, Christoph M. Kirsch, Alexander Miller, Hannes Payer, and Mario Preishuber. ACDC-JS: explorative benchmarking of JavaScript memory management. *ACM SIGPLAN Notices*, 50(2):67–78, February 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Kotthaus:2015:DPS

[1895] Helena Kotthaus, Ingo Korb, Michael Engel, and Peter Marwedel. Dynamic page sharing optimization for the R language. *ACM SIGPLAN Notices*, 50(2):79–90, February 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Khan:2015:UJW

[1896] Faiz Khan, Vincent Foley-Bourgon, Sujay Kathrotia, Erick Lavoie, and Laurie Hendren. Using JavaScript and WebCL for numerical computations: a comparative study of native and web technologies. *ACM SIGPLAN Notices*, 50(2): 91–102, February 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Rhodes:2015:DDO

[1897] Dustin Rhodes, Tim Disney, and Cormac Flanagan. Dynamic detection of object capability violations through model checking. *ACM SIGPLAN Notices*, 50(2):103–112, February 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Steinert:2015:OVS

[1898] Bastian Steinert, Lauritz Thamsen, Tim Felgentreff, and Robert Hirschfeld. Object versioning to support recovery needs: using proxies to preserve previous development states in lively. *ACM SIGPLAN Notices*, 50(2):113–124, February 2015. CODEN SIN-

ODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Matsakis:2015:TOJ

[1899] Nicholas D. Matsakis, David Herman, and Dmitry Lomov. Typed objects in JavaScript. *ACM SIGPLAN Notices*, 50(2):125–134, February 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Callau:2015:UTP

[1900] Oscar Callaú, Romain Robbes, Éric Tanter, David Röthlisberger, and Alexandre Bergel. On the use of type predicates in object-oriented software: the case of smalltalk. *ACM SIGPLAN Notices*, 50(2):135–146, February 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Jarvi:2015:SPH

[1901] Jaakko Järvi, Gabriel Foust, and Magne Haveraaen. Specializing planners for hierarchical multi-way dataflow constraint systems. *ACM SIGPLAN Notices*, 50(3):1–10, March 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Steindorfer:2015:CSM

[1902] Michael J. Steindorfer and Jurgen J. Vinju. Code specialization for memory efficient hash tries (short paper). *ACM SIGPLAN Notices*, 50(3):11–14, March 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Malakuti:2015:EGM

[1903] Somayeh Malakuti and Mehmet Aksit. Emergent gummy modules: modular representation of emergent behavior. *ACM SIGPLAN Notices*, 50(3): 15–24, March 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Gouseti:2015:ELI

[1904] Maria Gouseti, Chiel Peters, and Tijs van der Storm. Extensible language implementation with object algebras (short paper). *ACM SIGPLAN Notices*, 50(3):25–28, March 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Walkingshaw:2015:PEV

[1905] Eric Walkingshaw and Klaus Ostermann. Projectional editing of variational software. *ACM SIGPLAN Notices*, 50(3):29–38, March 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Ruprecht:2015:AFS

[1906] Andreas Ruprecht, Bernhard Heinloth, and Daniel Lohmann. Automatic feature selection in large-scale system-software product lines. *ACM SIGPLAN Notices*, 50(3):39–48, March 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Ma:2015:ETS

[1907] Lei Ma, Cyrille Artho, Cheng Zhang, and Hiroyuki Sato. Efficient testing of software product lines via cen-

tralization (short paper). *ACM SIGPLAN Notices*, 50(3):49–52, March 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Smeltzer:2015:TAD

[1908] Karl Smeltzer, Martin Erwig, and Ronald Metoyer. A transformational approach to data visualization. *ACM SIGPLAN Notices*, 50(3):53–62, March 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Shioda:2015:LLD

[1909] Masato Shioda, Hideya Iwasaki, and Shigeyuki Sato. LibDSL: a library for developing embedded domain specific languages in D via template metaprogramming. *ACM SIGPLAN Notices*, 50(3):63–72, March 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Jovanovic:2015:YYC

[1910] Vojin Jovanovic, Amir Shaikhha, Sandro Stucki, Vladimir Nikolaev, Christoph Koch, and Martin Odersky. Yin-Yang: concealing the deep embedding of DSLs. *ACM SIGPLAN Notices*, 50(3):73–82, March 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Hess:2015:ALF

[1911] Benjamin Hess, Thomas R. Gross, and Markus Püschel. Automatic locality-friendly interface extension of numerical functions. *ACM SIGPLAN Notices*, 50(3):83–92, March 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Kamin:2015:ORS

[1912] Sam Kamin, María Jesús Garzarán, Baris Aktemur, Danqing Xu, Buse Yilmaz, and Zhongbo Chen. Optimization by runtime specialization for sparse matrix–vector multiplication. *ACM SIGPLAN Notices*, 50(3): 93–102, March 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Danilewski:2015:STD

[1913] Piotr Danilewski, Marcel Köster, Roland Leißa, Richard Membarth, and Philipp Slusallek. Specialization through dynamic staging. *ACM SIGPLAN Notices*, 50(3):103–112, March 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Asai:2015:CRL

[1914] Kenichi Asai. Compiling a reflective language using MetaOCaml. *ACM SIGPLAN Notices*, 50(3):113–122, March 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Humer:2015:DSL

[1915] Christian Humer, Christian Wimmer, Christian Wirth, Andreas Wöß, and Thomas Würthinger. A domain-specific language for building self-optimizing AST interpreters. *ACM SIGPLAN Notices*, 50(3):123–132, March 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Hill:2015:POO

[1916] James H. Hill and Dennis C. Feiock. Pin++: an object-oriented framework for writing Pintools. *ACM SIGPLAN Notices*, 50(3):133–141, March 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Ozturk:2015:ASC

[1917] Ozcan Ozturk. Architectural support for cyber-physical systems. *ACM SIGPLAN Notices*, 50(4):1, April 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Zhang:2015:MRH

[1918] Yiying Zhang, Jian Yang, Amirsaman Memaripour, and Steven Swanson. Mojim: a reliable and highly-available non-volatile memory system. *ACM SIGPLAN Notices*, 50(4):3–18, April 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Wang:2015:SPC

[1919] Rujia Wang, Lei Jiang, Youtao Zhang, and Jun Yang. SD-PCM: Constructing reliable super dense phase change memory under write disturbance. *ACM SIGPLAN Notices*, 50(4):19–31, April 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Young:2015:DWE

[1920] Vinson Young, Prashant J. Nair, and Moinuddin K. Qureshi. DEUCE: Write-efficient encryption for non-volatile memories. *ACM SIGPLAN Notices*, 50(4):33–44, April 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Morrison:2015:TBT

[1921] Adam Morrison and Yehuda Afek. Temporally bounding TSO for fence-free asymmetric synchronization. *ACM SIGPLAN Notices*, 50(4):45–58, April 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Matveev:2015:RHN

[1922] Alexander Matveev and Nir Shavit. Reduced hardware NOrec: a safe and scalable hybrid transactional memory. *ACM SIGPLAN Notices*, 50(4):59–71, April 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Orr:2015:SUR

[1923] Marc S. Orr, Shuai Che, Ayse Yilmazer, Bradford M. Beckmann, Mark D. Hill, and David A. Wood. Synchronization using remote-scope promotion. *ACM SIGPLAN Notices*, 50 (4):73–86, April 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Liu:2015:GHS

[1924] Chang Liu, Austin Harris, Martin Maas, Michael Hicks, Mohit Tiwari, and Elaine Shi. GhostRider: a hardware-software system for memory trace oblivious computation. *ACM SIGPLAN Notices*, 50(4):87–101, April 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Fletcher:2015:FON

[1925] Christopher W. Fletcher, Ling Ren, Albert Kwon, Marten van Dijk, and Srinivas Devadas. Freecursive ORAM: [nearly] free recursion and integrity verification for position-based oblivious RAM. *ACM SIGPLAN Notices*, 50 (4):103–116, April 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Chisnall:2015:BPA

[1926] David Chisnall, Colin Rothwell, Robert N. M. Watson, Jonathan Woodruff, Munraj Vadera, Simon W. Moore, Michael Roe, Brooks Davis, and Peter G. Neumann. Beyond the PDP-11: Architectural support for a memory-safe C abstract machine. *ACM SIGPLAN Notices*, 50(4):117–130, April 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Ma:2015:SDS

[1927] Jiuyue Ma, Xiufeng Sui, Ninghui Sun, Yupeng Li, Zihao Yu, Bowen Huang, Tianni Xu, Zhicheng Yao, Yun Chen, Haibin Wang, Lixin Zhang, and Yungang Bao. Supporting differentiated services in computers via programmable architecture for resourcing-on-demand (PARD). *ACM SIGPLAN Notices*, 50(4):131–143, April 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Omote:2015:IAE

[1928] Yushi Omote, Takahiro Shinagawa, and Kazuhiko Kato. Improving agility and elasticity in bare-metal clouds. *ACM SIGPLAN Notices*, 50(4):145–159, April 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Haque:2015:FMI

[1929] Md E. Haque, Yong hun Eom, Yuxiong He, Sameh Elnikety, Ricardo Bianchini, and Kathryn S. McKinley. Few-to-many: Incremental parallelism for reducing tail latency in interactive services. *ACM SIGPLAN Notices*, 50(4): 161–175, April 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Colp:2015:PDS

[1930] Patrick Colp, Jiawen Zhang, James Gleeson, Sahil Suneja, Eyal de Lara, Himanshu Raj, Stefan Saroiu, and Alec Wolman. Protecting data on Smartphones and tablets from memory attacks. *ACM SIGPLAN Notices*, 50(4): 177–189, April 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Dautenhahn:2015:NKO

[1931] Nathan Dautenhahn, Theodoros Kasampalis, Will Dietz, John Criswell, and Vikram Adve. Nested kernel: an operating system architecture for intra-kernel privilege separation. *ACM SIGPLAN Notices*, 50(4):191–206, April 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Tan:2015:DWS

[1932] Zhangxi Tan, Zhenghao Qian, Xi Chen, Krste Asanovic, and David Patterson. DIABLO: a warehouse-scale computer network simulator using FP-

GAs. *ACM SIGPLAN Notices*, 50(4): 207–221, April 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Hauswald:2015:SOE

[1933] Johann Hauswald, Michael A. Laurenzano, Yunqi Zhang, Cheng Li, Austin Rovinski, Arjun Khurana, Ronald G. Dreslinski, Trevor Mudge, Vinicius Petrucci, Lingjia Tang, and Jason Mars. Sirius: an open end-to-end voice and vision personal assistant and its implications for future warehouse scale computers. *ACM SIGPLAN Notices*, 50(4):223–238, April 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Xu:2015:ALD

[1934] Chao Xu, Felix Xiaozhu Lin, Yuyang Wang, and Lin Zhong. Automated OS-level device runtime power management. *ACM SIGPLAN Notices*, 50(4): 239–252, April 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Goiri:2015:CTV

[1935] Íñigo Goiri, Thu D. Nguyen, and Ricardo Bianchini. CoolAir: Temperature- and variation-aware management for free-cooled datacenters. *ACM SIGPLAN Notices*, 50(4):253–265, April 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Mishra:2015:PGM

[1936] Nikita Mishra, Huazhe Zhang, John D. Lafferty, and Henry Hoffmann. A probabilistic graphical model-based approach for minimizing energy under performance constraints. *ACM SIGPLAN Notices*, 50(4):267–281, April 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Pang:2015:MLL

[1937] Jun Pang, Chris Dwyer, and Alvin R. Lebeck. More is less, less is more: Molecular-scale photonic NoC power topologies. *ACM SIGPLAN Notices*, 50(4):283–296, April 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Sridharan:2015:MEM

[1938] Vilas Sridharan, Nathan DeBardeleben, Sean Blanchard, Kurt B. Ferreira, Jon Stearley, John Shalf, and Sudhanva Gurumurthi. Memory errors in modern systems: The good, the bad, and the ugly. *ACM SIGPLAN Notices*, 50 (4):297–310, April 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Yetim:2015:CMC

[1939] Yavuz Yetim, Sharad Malik, and Margaret Martonosi. CommGuard: Mitigating communication errors in error-prone parallel execution. *ACM SIGPLAN Notices*, 50(4):311–323, April 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Kim:2015:DEF

[1940] Dohyeong Kim, Yonghwi Kwon, William N. Sumner, Xiangyu Zhang, and Dongyan Xu. Dual execution for

on-the-fly fine grained execution comparison. *ACM SIGPLAN Notices*, 50 (4):325–338, April 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Hosek:2015:VUE

[1941] Petr Hosek and Cristian Cadar. VARAN the unbelievable: an efficient N-version execution framework. *ACM SIGPLAN Notices*, 50(4):339–353, April 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Malka:2015:REI

[1942] Moshe Malka, Nadav Amit, Muli Ben-Yehuda, and Dan Tsafrir. rIOMMU: Efficient IOMMU for I/O devices that employ ring buffers. *ACM SIGPLAN Notices*, 50(4):355–368, April 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Liu:2015:PPM

[1943] Daofu Liu, Tianshi Chen, Shaoli Liu, Jinhong Zhou, Shengyuan Zhou, Olivier Teman, Xiaobing Feng, Xuehai Zhou, and Yunji Chen. PuDianNao: a polyvalent machine learning accelerator. *ACM SIGPLAN Notices*, 50 (4):369–381, April 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Goiri:2015:ABA

[1944] Inigo Goiri, Ricardo Bianchini, Santosh Nagarakatte, and Thu D. Nguyen. ApproxHadoop: Bringing approximations to MapReduce frameworks. *ACM SIGPLAN Notices*, 50(4):383–397, April 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Ringenburg:2015:MDQ

[1945] Michael Ringenburg, Adrian Sampson, Isaac Ackerman, Luis Ceze, and Dan Grossman. Monitoring and debugging the quality of results in approximate programs. *ACM SIGPLAN Notices*, 50 (4):399–411, April 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Banavar:2015:WEC

[1946] Guruduth Banavar. Watson and the era of cognitive computing. *ACM SIGPLAN Notices*, 50(4):413, April 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Stewart:2015:ZDW

[1947] Gordon Stewart, Mahanth Gowda, Geoffrey Mainland, Bozidar Radunovic, Dimitrios Vytiniotis, and Cristina Luengo Agullo. Ziria: a DSL for wireless systems programming. *ACM SIGPLAN Notices*, 50(4):415–428, April 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Mullapudi:2015:PAO

[1948] Ravi Teja Mullapudi, Vinay Vasista, and Uday Bondhugula. PolyMage: Automatic optimization for image processing pipelines. *ACM SIGPLAN Notices*, 50(4):429–443, April 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Heckey:2015:CMC

[1949] Jeff Heckey, Shruti Patil, Ali JavadiAbhari, Adam Holmes, Daniel Kudrow, Kenneth R. Brown, Diana Franklin, Frederic T. Chong, and Margaret Martonosi. Compiler management of communication and parallelism for quantum computation. *ACM SIGPLAN Notices*, 50(4):445–456, April 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Hassaan:2015:KDG

[1950] Muhammad Amber Hassaan, Donald D. Nguyen, and Keshav K. Pingali. Kinetic dependence graphs. *ACM SIGPLAN Notices*, 50(4):457–471, April 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Sidiroglou-Douskos:2015:TAI

[1951] Stelios Sidiroglou-Douskos, Eric Lahtinen, Nathan Rittenhouse, Paolo Piselli, Fan Long, Deokhwan Kim, and Martin Rinard. Targeted automatic integer overflow discovery using goal-directed conditional branch enforcement. *ACM SIGPLAN Notices*, 50(4): 473–486, April 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Dhawan:2015:ASS

[1952] Udit Dhawan, Catalin Hritcu, Raphael Rubin, Nikos Vasilakis, Silviu Chiricescu, Jonathan M. Smith, Thomas F. Knight, Jr., Benjamin C. Pierce, and Andre DeHon. Architectural support for software-defined metadata processing. *ACM SIGPLAN Notices*, 50(4): 487–502, April 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Zhang:2015:HDL

[1953] Danfeng Zhang, Yao Wang, G. Edward Suh, and Andrew C. Myers. A hardware design language for timing-sensitive information-flow security. *ACM SIGPLAN Notices*, 50(4): 503–516, April 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Hicks:2015:SLR

[1954] Matthew Hicks, Cynthia Sturton, Samuel T. King, and Jonathan M. Smith. SPECS: a lightweight runtime mechanism for protecting software from security-critical processor bugs. *ACM SIGPLAN Notices*, 50(4): 517–529, April 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Duan:2015:AMF

[1955] Yuelu Duan, Nima Honarmand, and Josep Torrellas. Asymmetric memory fences: Optimizing both performance and implementability. *ACM SIGPLAN Notices*, 50(4):531–543, April 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Sung:2015:DES

[1956] Hyojin Sung and Sarita V. Adve. DeNovoSync: Efficient support for arbitrary synchronization without writer-initiated invalidations. *ACM SIGPLAN Notices*, 50(4):545–559, April 2015. CODEN SINODQ. ISSN 0362-

1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Sengupta:2015:HSD

[1957] Aritra Sengupta, Swarnendu Biswas, Minjia Zhang, Michael D. Bond, and Milind Kulkarni. Hybrid static-dynamic analysis for statically bounded region serializability. *ACM SIGPLAN Notices*, 50(4):561–575, April 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Alglave:2015:GCW

[1958] Jade Alglave, Mark Batty, Alastair F. Donaldson, Ganesh Gopalakrishnan, Jeroen Ketema, Daniel Poetzl, Tyler Sorensen, and John Wickerson. GPU concurrency: Weak behaviours and programming assumptions. *ACM SIGPLAN Notices*, 50(4):577–591, April 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Park:2015:CCP

[1959] Jason Jong Kyu Park, Yongjun Park, and Scott Mahlke. Chimera: Collaborative preemption for multitasking on a shared GPU. *ACM SIGPLAN Notices*, 50(4):593–606, April 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Agarwal:2015:PPS

[1960] Neha Agarwal, David Nellans, Mark Stephenson, Mike O'Connor, and Stephen W. Keckler. Page placement strategies for GPUs within heterogeneous memory systems. *ACM SIGPLAN Notices*, 50(4):607–618, April 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Zhao:2015:FPS

[1961] Zhijia Zhao and Xipeng Shen. On-the-fly principled speculation for FSM parallelization. *ACM SIGPLAN Notices*, 50(4):619–630, April 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

David:2015:ACS

[1962] Tudor David, Rachid Guerraoui, and Vasileios Trigonakis. Asynchronized concurrency: The secret to scaling concurrent search data structures. *ACM SIGPLAN Notices*, 50(4):631–644, April 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Bhatotia:2015:ITL

[1963] Pramod Bhatotia, Pedro Fonseca, Umut A. Acar, Björn B. Brandenburg, and Rodrigo Rodrigues. iThreads: a threading library for parallel incremental computation. *ACM SIGPLAN Notices*, 50(4):645–659, April 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Gidra:2015:NGC

[1964] Lokesh Gidra, Gaël Thomas, Julien Sopena, Marc Shapiro, and Nhan Nguyen. NumaGiC: a garbage collector for big data on big NUMA machines. *ACM SIGPLAN Notices*, 50 (4):661–673, April 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Nguyen:2015:FCR

[1965] Khanh Nguyen, Kai Wang, Yingyi Bu, Lu Fang, Jianfei Hu, and Guoqing Xu. FACADE: a compiler and runtime for (almost) object-bounded big data applications. *ACM SIGPLAN Notices*, 50 (4):675–690, April 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Agrawal:2015:ASD

[1966] Varun Agrawal, Abhiroop Dabral, Tapti Palit, Yongming Shen, and Michael Ferdman. Architectural support for dynamic linking. *ACM SIGPLAN Notices*, 50(4):691–702, April 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Baird:2015:OTC

[1967] Ryan Baird, Peter Gavin, Magnus Själander, David Whalley, and Gang-Ryung Uh. Optimizing transfers of control in the static pipeline architecture. *ACM SIGPLAN Notices*, 50(5): 1:1–1:??, May 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Liu:2015:CCD

[1968] Qingrui Liu, Changhee Jung, Dongyoon Lee, and Devesh Tiwari. Clover: Compiler directed lightweight soft error resilience. *ACM SIGPLAN Notices*, 50 (5):2:1–2:??, May 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Bardizbanyan:2015:IDA

[1969] Alen Bardizbanyan, Magnus Själander, David Whalley, and Per Larsson-Edefors. Improving data access efficiency by using context-aware loads and stores. *ACM SIGPLAN Notices*, 50 (5):3:1–3:??, May 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Stilkerich:2015:PGA

[1970] Isabella Stilkerich, Clemens Lang, Christoph Erhardt, and Michael Stilkerich. A practical getaway: Applications of escape analysis in embedded real-time systems. *ACM SIGPLAN Notices*, 50(5):4:1–4:??, May 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Manilov:2015:FRT

[1971] Stanislav Manilov, Björn Franke, Anthony Magrath, and Cedric Andrieu. Free rider: a tool for retargeting platform-specific intrinsic functions. *ACM SIGPLAN Notices*, 50 (5):5:1–5:??, May 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Dietrich:2015:CKC

[1972] Christian Dietrich, Martin Hoffmann, and Daniel Lohmann. Cross-kernel control-flow–graph analysis for event-driven real-time systems. *ACM SIGPLAN Notices*, 50(5):6:1–6:??, May 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Ghosh:2015:EEA

[1973] Soumyadeep Ghosh, Yongjun Park, and Arun Raman. Enabling efficient alias speculation. *ACM SIGPLAN Notices*, 50(5):7:1–7:??, May

2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Zheng:2015:WAD

[1974] Wenguang Zheng and Hui Wu. WCET-Aware dynamic D-cache locking for a single task. *ACM SIGPLAN Notices*, 50(5):8:1–8:??, May 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Lin:2015:STU

[1975] Yixiao Lin and Sayan Mitra. StarL: Towards a unified framework for programming, simulating and verifying distributed robotic systems. *ACM SIGPLAN Notices*, 50(5):9:1–9:??, May 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Zhang:2015:IPA

[1976] Zhenkai Zhang and Xenofon Koutsoukos. Improving the precision of abstract interpretation based cache persistence analysis. *ACM SIGPLAN Notices*, 50(5):10:1–10:??, May 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Barijough:2015:IAM

[1977] Kamyar Mirzazad Barijough, Matin Hashemi, Volodymyr Khibin, and Soheil Ghiasi. Implementation-aware model analysis: The case of buffer-throughput tradeoff in streaming applications. *ACM SIGPLAN Notices*, 50(5):11:1–11:??, May 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Liu:2015:SDS

[1978] Chen Liu and Chengmo Yang. Secure and durable (SEDURA): an integrated encryption and wear-leveling framework for PCM-based main memory. *ACM SIGPLAN Notices*, 50(5): 12:1–12:??, May 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Procter:2015:SDH

[1979] Adam Procter, William L. Harrison, Ian Graves, Michela Becchi, and Gerard Allwein. Semantics driven hardware design, implementation, and verification with ReWire. *ACM SIGPLAN Notices*, 50(5):13:1–13:??, May 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Woithe:2015:TPA

[1980] Hans Christian Woithe and Ulrich Kremer. TrilobiteG: a programming architecture for autonomous underwater vehicles. *ACM SIGPLAN Notices*, 50(5): 14:1–14:??, May 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Panchekha:2015:AIA

[1981] Pavel Panchekha, Alex Sanchez-Stern, James R. Wilcox, and Zachary Tatlock. Automatically improving accuracy for floating point expressions. *ACM SIGPLAN Notices*, 50(6):1–11, June 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Zhang:2015:DTE

[1982] Danfeng Zhang, Andrew C. Myers, Dimitrios Vytiniotis, and Simon Peyton-Jones. Diagnosing type errors with class. *ACM SIGPLAN Notices*, 50(6):12–21, June 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Lopes:2015:PCP

[1983] Nuno P. Lopes, David Menendez, Santosh Nagarakatte, and John Regehr. Provably correct peephole optimizations with Alive. *ACM SIGPLAN Notices*, 50(6):22–32, June 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Faddegon:2015:ADR

[1984] Maarten Faddegon and Olaf Chitil. Algorithmic debugging of real-world Haskell programs: deriving dependencies from the cost centre stack. *ACM SIGPLAN Notices*, 50(6):33–42, June 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Sidiroglou-Douskos:2015:AEE

[1985] Stelios Sidiroglou-Douskos, Eric Lahtinen, Fan Long, and Martin Rinard. Automatic error elimination by horizontal code transfer across multiple applications. *ACM SIGPLAN Notices*, 50 (6):43–54, June 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Liu:2015:LRT

[1986] Peng Liu, Xiangyu Zhang, Omer Tripp, and Yunhui Zheng. Light: replay via tightly bounded recording. *ACM SIGPLAN Notices*, 50(6):55–64, June 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Lidbury:2015:MCC

[1987] Christopher Lidbury, Andrei Lascu, Nathan Chong, and Alastair F. Donaldson. Many-core compiler fuzzing. *ACM SIGPLAN Notices*, 50(6):65–76, June 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Sergey:2015:MVF

[1988] Ilya Sergey, Aleksandar Nanevski, and Anindya Banerjee. Mechanized verification of fine-grained concurrent programs. *ACM SIGPLAN Notices*, 50 (6):77–87, June 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Sharma:2015:VPC

[1989] Rahul Sharma, Michael Bauer, and Alex Aiken. Verification of producer-consumer synchronization in GPU programs. *ACM SIGPLAN Notices*, 50 (6):88–98, June 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Gammie:2015:RSV

[1990] Peter Gammie, Antony L. Hosking, and Kai Engelhardt. Relaxing safely: verified on-the-fly garbage collection for x86-TSO. *ACM SIGPLAN Notices*, 50(6):99–109, June 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Tassarotti:2015:VRC

[1991] Joseph Tassarotti, Derek Dreyer, and Viktor Vafeiadis. Verifying read-copy-update in a logic for weak memory. *ACM SIGPLAN Notices*, 50(6): 110–120, June 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Ko:2015:LCT

[1992] Yousun Ko, Bernd Burgstaller, and Bernhard Scholz. LaminarIR: compile-time queues for structured streams. *ACM SIGPLAN Notices*, 50(6):121–130, June 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Ding:2015:OCA

[1993] Wei Ding, Xulong Tang, Mahmut Kandemir, Yuanrui Zhang, and Emre Kultursay. Optimizing off-chip accesses in multicores. *ACM SIGPLAN Notices*, 50(6):131–142, June 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Mehta:2015:ICS

[1994] Sanyam Mehta and Pen-Chung Yew. Improving compiler scalability: optimizing large programs at small price. *ACM SIGPLAN Notices*, 50(6):143–152, June 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Appel:2015:VCP

[1995] Andrew W. Appel. Verification of a cryptographic primitive: SHA-256 (abstract). *ACM SIGPLAN Notices*, 50 (6):153, June 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Deligiannis:2015:APA

[1996] Pantazis Deligiannis, Alastair F. Donaldson, Jeroen Ketema, Akash Lal, and Paul Thomson. Asynchronous programming, analysis and testing with state machines. *ACM SIGPLAN Notices*, 50(6):154–164, June 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Huang:2015:SMC

[1997] Jeff Huang. Stateless model checking concurrent programs with maximal causality reduction. *ACM SIGPLAN Notices*, 50(6):165–174, June 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Samak:2015:SRT

[1998] Malavika Samak, Murali Krishna Ramanathan, and Suresh Jagannathan. Synthesizing racy tests. *ACM SIGPLAN Notices*, 50(6):175–185, June 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Koskinen:2015:PPM

[1999] Eric Koskinen and Matthew Parkinson. The Push/Pull model of transactions. *ACM SIGPLAN Notices*, 50 (6):186–195, June 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

McClurg:2015:ESN

[2000] Jedidiah McClurg, Hossein Hojjat, Pavol Cerný, and Nate Foster. Efficient synthesis of network updates. *ACM SIGPLAN Notices*, 50(6):196–207, June 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Nori:2015:ESP

[2001] Aditya V. Nori, Sherjil Ozair, Sriram K. Rajamani, and Deepak Vijaykeerthy. Efficient synthesis of probabilistic programs. *ACM SIGPLAN Notices*, 50(6):208–217, June 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Barowy:2015:FER

[2002] Daniel W. Barowy, Sumit Gulwani, Ted Hart, and Benjamin Zorn. FlashRelate: extracting relational data from semi-structured spreadsheets using examples. *ACM SIGPLAN Notices*, 50(6):218–228, June 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Feser:2015:SDS

[2003] John K. Feser, Swarat Chaudhuri, and Isil Dillig. Synthesizing data structure transformations from input-output examples. *ACM SIGPLAN Notices*, 50 (6):229–239, June 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Ziv:2015:CCC

[2004] Ofri Ziv, Alex Aiken, Guy Golan-Gueta, G. Ramalingam, and Mooly Sagiv. Composing concurrency control. *ACM SIGPLAN Notices*, 50(6): 240–249, June 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Zhang:2015:DPO

[2005] Naling Zhang, Markus Kusano, and Chao Wang. Dynamic partial order reduction for relaxed memory models. *ACM SIGPLAN Notices*, 50(6): 250–259, June 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Emmi:2015:MRS

[2006] Michael Emmi, Constantin Enea, and Jad Hamza. Monitoring refinement via symbolic reasoning. *ACM SIGPLAN Notices*, 50(6):260–269, June 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Longfield:2015:PGS

[2007] Stephen Longfield, Brittany Nkounkou, Rajit Manohar, and Ross Tate. Preventing glitches and short circuits in high-level self-timed chip specifications. *ACM SIGPLAN Notices*, 50(6): 270–279, June 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Lal:2015:DID

[2008] Akash Lal and Shaz Qadeer. DAG inlining: a decision procedure for reachability-modulo-theories in hierarchical programs. *ACM SIGPLAN Notices*, 50(6):280–290, June 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Johnson:2015:EES

[2009] Andrew Johnson, Lucas Waye, Scott Moore, and Stephen Chong. Exploring and enforcing security guarantees via program dependence graphs. *ACM SIGPLAN Notices*, 50(6):291–302, June 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Singh:2015:MNP

[2010] Gagandeep Singh, Markus Püschel, and Martin Vechev. Making numerical program analysis fast. *ACM SIGPLAN Notices*, 50(6):303–313, June 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Weijiang:2015:TDA

[2011] Yusheng Weijiang, Shruthi Balakrishna, Jianqiao Liu, and Milind Kulkarni. Tree dependence analysis. *ACM SIGPLAN Notices*, 50(6):314–325, June 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Kang:2015:FCM

[2012] Jeehoon Kang, Chung-Kil Hur, William Mansky, Dmitri Garbuzov, Steve Zdancewic, and Viktor Vafeiadis. A formal C memory model supporting integer-pointer casts. *ACM SIGPLAN Notices*, 50(6):326–335, June 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Hathhorn:2015:DUC

[2013] Chris Hathhorn, Chucky Ellison, and Grigore Rosu. Defining the undefinedness of C. *ACM SIGPLAN Notices*, 50(6):336–345, June 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Park:2015:KCF

[2014] Daejun Park, Andrei Stefanescu, and Grigore Rosu. KJS: a complete formal semantics of JavaScript. *ACM SIGPLAN Notices*, 50(6):346–356, June 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Wilcox:2015:VFI

[2015] James R. Wilcox, Doug Woos, Pavel Panchekha, Zachary Tatlock, Xi Wang, Michael D. Ernst, and Thomas Anderson. Verdi: a framework for implementing and formally verifying distributed systems. *ACM SIGPLAN Notices*, 50(6):357–368, June 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Olivo:2015:SDA

[2016] Oswaldo Olivo, Isil Dillig, and Calvin Lin. Static detection of asymptotic performance bugs in collection traversals. *ACM SIGPLAN Notices*, 50(6):369–378, June 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Ding:2015:AAC

[2017] Yufei Ding, Jason Ansel, Kalyan Veeramachaneni, Xipeng Shen, Una-May O'Reilly, and Saman Amarasinghe. Autotuning algorithmic choice for input sensitivity. *ACM SIGPLAN Notices*, 50(6):379–390, June 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Mendis:2015:HLH

[2018] Charith Mendis, Jeffrey Bosboom, Kevin Wu, Shoaib Kamil, Jonathan Ragan-Kelley, Sylvain Paris, Qin Zhao, and Saman Amarasinghe. Helium: lifting high-performance stencil kernels from stripped x86 binaries to halide DSL code. *ACM SIGPLAN Notices*, 50 (6):391–402, June 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Bowman:2015:PGM

[2019] William J. Bowman, Swaha Miller, Vincent St-Amour, and R. Kent Dybvig. Profile-guided meta-programming. *ACM SIGPLAN Notices*, 50(6):403–412, June 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Sivaramakrishnan:2015:DPE

[2020] KC Sivaramakrishnan, Gowtham Kaki, and Suresh Jagannathan. Declarative programming over eventually consistent data stores. *ACM SIGPLAN Notices*, 50(6):413–424, June 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Siek:2015:BCT

[2021] Jeremy Siek, Peter Thiemann, and Philip Wadler. Blame and coercion: together again for the first time. *ACM SIGPLAN Notices*, 50(6): 425–435, June 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Zhang:2015:LFO

[2022] Yizhou Zhang, Matthew C. Loring, Guido Salvaneschi, Barbara Liskov, and Andrew C. Myers. Lightweight, flexible object-oriented generics. *ACM SIGPLAN Notices*, 50(6):436–445, June 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Nguyen:2015:RCC

[2023] Phúc C. Nguyễn and David Van Horn. Relatively complete counterexamples for higher-order programs. *ACM SIGPLAN Notices*, 50(6):446–456, June 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Chu:2015:AIP

[2024] Duc-Hiep Chu, Joxan Jaffar, and Minh-Thai Trinh. Automatic induction proofs of data-structures in imperative programs. *ACM SIGPLAN Notices*, 50 (6):457–466, June 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Carbonneaux:2015:CCR

[2025] Quentin Carbonneaux, Jan Hoffmann, and Zhong Shao. Compositional certified resource bounds. *ACM SIGPLAN Notices*, 50(6):467–478, June 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Crary:2015:PPA

[2026] Karl Crary and Michael J. Sullivan. Peer-to-peer affine commitment using bitcoin. *ACM SIGPLAN Notices*, 50 (6):479–488, June 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Le:2015:TNT

[2027] Ton Chanh Le, Shengchao Qin, and Wei-Ngan Chin. Termination and non-termination specification inference. *ACM SIGPLAN Notices*, 50(6): 489–498, June 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Emani:2015:CDM

[2028] Murali Krishna Emani and Michael O'Boyle. Celebrating diversity: a mixture of experts approach for runtime mapping in dynamic environments. *ACM SIGPLAN Notices*, 50 (6):499–508, June 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Ren:2015:EER

[2029] Bin Ren, Youngjoon Jo, Sriram Krishnamoorthy, Kunal Agrawal, and Milind Kulkarni. Efficient execution of recursive programs on commodity vector hardware. *ACM SIGPLAN Notices*, 50 (6):509–520, June 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Venkat:2015:LDT

[2030] Anand Venkat, Mary Hall, and Michelle Strout. Loop and data transformations for sparse matrix code. *ACM SIGPLAN Notices*, 50(6):521–532, June 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Prountzos:2015:SPG

[2031] Dimitrios Prountzos, Roman Manevich, and Keshav Pingali. Synthesizing parallel graph programs via automated planning. *ACM SIGPLAN Notices*, 50 (6):533–544, June 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Marr:2015:ZOM

[2032] Stefan Marr, Chris Seaton, and Stéphane Ducasse. Zero-overhead metaprogramming: reflection and metaobject protocols fast and without compromises. *ACM SIGPLAN Notices*, 50(6):545–554, June 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Isradisaikul:2015:FCP

[2033] Chinawat Isradisaikul and Andrew C. Myers. Finding counterexamples from parsing conflicts. *ACM SIGPLAN Notices*, 50(6):555–564, June 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Leung:2015:IPS

[2034] Alan Leung, John Sarracino, and Sorin Lerner. Interactive parser synthesis by example. *ACM SIGPLAN Notices*, 50 (6):565–574, June 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Lucia:2015:SSP

[2035] Brandon Lucia and Benjamin Ransford. A simpler, safer programming and execution model for intermittent systems. *ACM SIGPLAN Notices*, 50 (6):575–585, June 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Machado:2015:CDD

[2036] Nuno Machado, Brandon Lucia, and Luís Rodrigues. Concurrency debugging with differential schedule projections. *ACM SIGPLAN Notices*, 50(6): 586–595, June 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Srinivasan:2015:SMC

[2037] Venkatesh Srinivasan and Thomas Reps. Synthesis of machine code from semantics. *ACM SIGPLAN Notices*, 50 (6):596–607, June 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Gonnord:2015:SRF

[2038] Laure Gonnord, David Monniaux, and Gabriel Radanne. Synthesis of ranking functions using extremal counterexamples. *ACM SIGPLAN Notices*, 50 (6):608–618, June 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Osera:2015:TED

[2039] Peter-Michael Osera and Steve Zdancewic. Type-and-example-directed program synthesis. *ACM SIGPLAN Notices*, 50 (6):619–630, June 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Tu:2015:CIE

[2040] Cheng-Chun Tu, Michael Ferdman, Chao tung Lee, and Tzi cker Chiueh. A comprehensive implementation and evaluation of direct interrupt delivery. *ACM SIGPLAN Notices*, 50(7):1–15, July 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Pfefferle:2015:HVF

[2041] Jonas Pfefferle, Patrick Stuedi, Animesh Trivedi, Bernard Metzler, Ionnis Koltsidas, and Thomas R. Gross. A hybrid I/O virtualization framework for RDMA-capable network interfaces. *ACM SIGPLAN Notices*, 50(7):17–30, July 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Younge:2015:SHP

[2042] Andrew J. Younge, John Paul Walters, Stephen P. Crago, and Geoffrey C. Fox. Supporting high performance molecular dynamics in virtualized clusters using IOMMU, SR-IOV, and GPUDirect. *ACM SIGPLAN Notices*, 50(7):31–38, July 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Guo:2015:PBL

[2043] Fei Guo, Seongbeom Kim, Yury Baskakov, and Ishan Banerjee. Proactively breaking large pages to improve memory overcommitment performance in VMware ESXi. *ACM SIGPLAN Notices*, 50(7):39–51, July 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Wang:2015:HPI

[2044] Zhe Wang, Jianjun Li, Chenggang Wu, Dongyan Yang, Zhenjiang Wang, Wei-Chung Hsu, Bin Li, and Yong Guan. HSPT: Practical implementation and efficient management of embedded shadow page tables for cross-ISA system virtual machines. *ACM SIGPLAN Notices*, 50(7):53–64, July

2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Kehne:2015:GEO

[2045] Jens Kehne, Jonathan Metter, and Frank Bellosa. GPUswap: Enabling oversubscription of GPU memory through transparent swapping. *ACM SIGPLAN Notices*, 50(7):65–77, July 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Gupta:2015:HER

[2046] Vishal Gupta, Min Lee, and Karsten Schwan. HeteroVisor: Exploiting resource heterogeneity to enhance the elasticity of cloud platforms. *ACM SIGPLAN Notices*, 50(7):79–92, July 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Wang:2015:DAA

[2047] Hui Wang, Canturk Isci, Lavanya Subramanian, Jongmoo Choi, Depei Qian, and Onur Mutlu. A-DRM: Architecture-aware distributed resource management of virtualized clusters. *ACM SIGPLAN Notices*, 50 (7):93–106, July 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Singh:2015:TVC

[2048] Rayman Preet Singh, Tim Brecht, and S. Keshav. Towards VM consolidation using a hierarchy of idle states. *ACM SIGPLAN Notices*, 50(7):107–119, July 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Kyle:2015:ADA

[2049] Stephen Kyle, Hugh Leather, Björn Franke, Dave Butcher, and Stuart Monteith. Application of domain-aware binary fuzzing to aid Android virtual machine testing. *ACM SIGPLAN Notices*, 50(7):121–132, July 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Suneja:2015:EVI

[2050] Sahil Suneja, Canturk Isci, Eyal de Lara, and Vasanth Bala. Exploring VM introspection: Techniques and trade-offs. *ACM SIGPLAN Notices*, 50 (7):133–146, July 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Zeng:2015:PPH

[2051] Junyuan Zeng, Yangchun Fu, and Zhiqiang Lin. PEMU: a pin highly compatible out-of-VM dynamic binary instrumentation framework. *ACM SIGPLAN Notices*, 50(7):147–160, July 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Jaffer:2015:IRD

[2052] Shehbaz Jaffer, Piyus Kedia, and Sorav Bansal. Improving remote desktopping through adaptive record/replay. *ACM SIGPLAN Notices*, 50(7):161–172, July 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Oh:2015:MWA

[2053] JinSeok Oh, Jin woo Kwon, Hyukwoo Park, and Soo-Mook Moon. Migration

of Web applications with seamless execution. *ACM SIGPLAN Notices*, 50 (7):173–185, July 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Ren:2015:ASE

[2054] Jianbao Ren, Yong Qi, Yuehua Dai, Xiaoguang Wang, and Yi Shi. AppSec: a safe execution environment for security sensitive applications. *ACM SIGPLAN Notices*, 50(7):187–199, July 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Jin:2015:HAS

[2055] Seongwook Jin, Jinho Seol, Jaehyuk Huh, and Seungryoul Maeng. Hardware-assisted secure resource accounting under a vulnerable hypervisor. *ACM SIGPLAN Notices*, 50(7): 201–213, July 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Cui:2015:PPA

[2056] Lei Cui, Tianyu Wo, Bo Li, Jianxin Li, Bin Shi, and Jinpeng Huai. PARS: a page-aware replication system for efficiently storing virtual machine snapshots. *ACM SIGPLAN Notices*, 50 (7):215–228, July 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Gramoli:2015:MTY

[2057] Vincent Gramoli. More than you ever wanted to know about synchronization: synchrobench, measuring the impact of the synchronization on concurrent algorithms. *ACM SIGPLAN Notices*, 50 (8):1–10, August 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Alistarh:2015:SSR

[2058] Dan Alistarh, Justin Kopinsky, Jerry Li, and Nir Shavit. The SprayList: a scalable relaxed priority queue. *ACM SIGPLAN Notices*, 50(8):11–20, August 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Arbel:2015:PRR

[2059] Maya Arbel and Adam Morrison. Predicate RCU: an RCU for scalable concurrent updates. *ACM SIGPLAN Notices*, 50(8):21–30, August 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Golan-Gueta:2015:ASA

[2060] Guy Golan-Gueta, G. Ramalingam, Mooly Sagiv, and Eran Yahav. Automatic scalable atomicity via semantic locking. *ACM SIGPLAN Notices*, 50 (8):31–41, August 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Benson:2015:FPP

[2061] Austin R. Benson and Grey Ballard. A framework for practical parallel fast matrix multiplication. *ACM SIGPLAN Notices*, 50(8):42–53, August 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Acharya:2015:PNC

[2062] Aravind Acharya and Uday Bondhugula. PLUTO+: near-complete

modeling of affine transformations for parallelism and locality. *ACM SIGPLAN Notices*, 50(8):54–64, August 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Ravishankar:2015:DMC

[2063] Mahesh Ravishankar, Roshan Dathathri, Venmugil Elango, Louis-Noël Pouchet, J. Ramanujam, Atanas Rountev, and P. Sadayappan. Distributed memory code generation for mixed irregular/regular computations. *ACM SIGPLAN Notices*, 50(8):65–75, August 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Xiang:2015:SPH

[2064] Lingxiang Xiang and Michael L. Scott. Software partitioning of hardware transactions. *ACM SIGPLAN Notices*, 50(8):76–86, August 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Baldassin:2015:PID

[2065] Alexandro Baldassin, Edson Borin, and Guido Araujo. Performance implications of dynamic memory allocators on transactional memory systems. *ACM SIGPLAN Notices*, 50(8):87–96, August 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Zhang:2015:LOS

[2066] Minjia Zhang, Jipeng Huang, Man Cao, and Michael D. Bond. Low-overhead software transactional memory with progress guarantees and strong semantics. *ACM SIGPLAN Notices*, 50(8):97–108, August 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Chabbi:2015:BEP

[2067] Milind Chabbi, Wim Lavrijsen, Wibe de Jong, Koushik Sen, John Mellor-Crummey, and Costin Iancu. Barrier elision for production parallel programs. *ACM SIGPLAN Notices*, 50(8): 109–119, August 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Thebault:2015:SEI

[2068] Loïc Thébault, Eric Petit, and Quang Dinh. Scalable and efficient implementation of 3D unstructured meshes computation: a case study on matrix assembly. *ACM SIGPLAN Notices*, 50 (8):120–129, August 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Tallent:2015:DCS

[2069] Nathan R. Tallent, Abhinav Vishnu, Hubertus Van Dam, Jeff Daily, Darren J. Kerbyson, and Adolfy Hoisie. Diagnosing the causes and severity of one-sided message contention. *ACM SIGPLAN Notices*, 50(8):130–139, August 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Chang:2015:PAG

[2070] Yen-Jung Chang and Vijay K. Garg. A parallel algorithm for global states enumeration in concurrent systems. *ACM*

SIGPLAN Notices, 50(8):140–149, August 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Cogumbreiro:2015:DDV

[2071] Tiago Cogumbreiro, Raymond Hu, Francisco Martins, and Nobuko Yoshida. Dynamic deadlock verification for general barrier synchronisation. *ACM SIGPLAN Notices*, 50(8): 150–160, August 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

You:2015:VFO

[2072] Yi-Ping You, Hen-Jung Wu, Yeh-Ning Tsai, and Yen-Ting Chao. VirtCL: a framework for OpenCL device abstraction and management. *ACM SIGPLAN Notices*, 50(8):161–172, August 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Ashari:2015:OML

[2073] Arash Ashari, Shirish Tatikonda, Matthias Boehm, Berthold Reinwald, Keith Campbell, John Keenleyside, and P. Sadayappan. On optimizing machine learning workloads via kernel fusion. *ACM SIGPLAN Notices*, 50(8): 173–182, August 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Zhang:2015:NAG

[2074] Kaiyuan Zhang, Rong Chen, and Haibo Chen. NUMA-aware graph-structured analytics. *ACM SIGPLAN Notices*, 50 (8):183–193, August 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Xie:2015:SAT

[2075] Chenning Xie, Rong Chen, Haibing Guan, Binyu Zang, and Haibo Chen. SYNC or ASYNC: time to fuse for distributed graph-parallel computation. *ACM SIGPLAN Notices*, 50(8):194–204, August 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Tang:2015:COW

[2076] Yuan Tang, Ronghui You, Haibin Kan, Jesmin Jahan Tithi, Pramod Ganapathi, and Rezaul A. Chowdhury. Cache-oblivious wavefront: improving parallelism of recursive dynamic programming algorithms without losing cache-efficiency. *ACM SIGPLAN Notices*, 50(8):205–214, August 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Chabbi:2015:HPL

[2077] Milind Chabbi, Michael Fagan, and John Mellor-Crummey. High performance locks for multi-level NUMA systems. *ACM SIGPLAN Notices*, 50(8): 215–226, August 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Majo:2015:LPC

[2078] Zoltan Majo and Thomas R. Gross. A library for portable and composable data locality optimizations for NUMA systems. *ACM SIGPLAN Notices*, 50(8):227–238, August 2015. CODEN SINODQ. ISSN 0362-1340

(print), 1523-2867 (print), 1558-1160 (electronic).

Amer:2015:MRC

[2079] Abdelhalim Amer, Huiwei Lu, Yanjie Wei, Pavan Balaji, and Satoshi Matsuoka. MPI+Threads: runtime contention and remedies. *ACM SIGPLAN Notices*, 50(8):239–248, August 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

McPherson:2015:FPL

[2080] Andrew J. McPherson, Vijay Nagarajan, Susmit Sarkar, and Marcelo Cintra. Fence placement for legacy data-race-free programs via synchronization read detection. *ACM SIGPLAN Notices*, 50(8):249–250, August 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Piao:2015:JJF

[2081] Xianglan Piao, Channoh Kim, Younghwan Oh, Huiying Li, Jincheon Kim, Hanjun Kim, and Jae W. Lee. JAWS: a JavaScript framework for adaptive CPU–GPU work sharing. *ACM SIGPLAN Notices*, 50(8):251–252, August 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Seo:2015:GGS

[2082] Hyunseok Seo, Jinwook Kim, and Min-Soo Kim. GStream: a graph streaming processing method for large-scale graphs on GPUs. *ACM SIGPLAN Notices*, 50(8):253–254, August 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Al-Saber:2015:SSA

[2083] Nabeel Al-Saber and Milind Kulkarni. SemCache++: semantics-aware caching for efficient multi-GPU offloading. *ACM SIGPLAN Notices*, 50(8): 255–256, August 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Kim:2015:OBU

[2084] Jungwon Kim, Seyong Lee, and Jeffrey S. Vetter. An OpenACC-based unified programming model for multi-accelerator systems. *ACM SIGPLAN Notices*, 50(8):257–258, August 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Thomson:2015:LHB

[2085] Paul Thomson and Alastair F. Donaldson. The lazy happens-before relation: better partial-order reduction for systematic concurrency testing. *ACM SIGPLAN Notices*, 50(8):259–260, August 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Haidar:2015:TBL

[2086] Azzam Haidar, Tingxing Dong, Piotr Luszczek, Stanimire Tomov, and Jack Dongarra. Towards batched linear solvers on accelerated hardware platforms. *ACM SIGPLAN Notices*, 50(8): 261–262, August 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Muralidharan:2015:COP

[2087] Saurav Muralidharan, Michael Garland, Bryan Catanzaro, Albert Sidelnik, and Mary Hall. A collection-oriented programming model for performance portability. *ACM SIGPLAN Notices*, 50(8):263–264, August 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Wang:2015:GHP

[2088] Yangzihao Wang, Andrew Davidson, Yuechao Pan, Yuduo Wu, Andy Riffel, and John D. Owens. Gunrock: a high-performance graph processing library on the GPU. *ACM SIGPLAN Notices*, 50(8):265–266, August 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Pearce:2015:DLB

[2089] Olga Pearce, Todd Gamblin, Bronis R. de Supinski, Martin Schulz, and Nancy M. Amato. Decoupled load balancing. *ACM SIGPLAN Notices*, 50 (8):267–268, August 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Jin:2015:CPI

[2090] Ye Jin, Mingliang Liu, Xiaosong Ma, Qing Liu, Jeremy Logan, Norbert Podhorszki, Jong Youl Choi, and Scott Klasky. Combining phase identification and statistic modeling for automated parallel benchmark generation. *ACM SIGPLAN Notices*, 50(8):269–270, August 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Shi:2015:OAG

[2091] Xuanhua Shi, Junling Liang, Sheng Di, Bingsheng He, Hai Jin, Lu Lu, Zhixiang Wang, Xuan Luo, and Jianlong Zhong. Optimization of asynchronous graph processing on GPU with hybrid coloring model. *ACM SIGPLAN Notices*, 50(8):271–272, August 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

West:2015:ERO

[2092] Scott West, Sebastian Nanz, and Bertrand Meyer. Efficient and reasonable object-oriented concurrency. *ACM SIGPLAN Notices*, 50(8):273–274, August 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Vassiliadis:2015:PMR

[2093] Vassilis Vassiliadis, Konstantinos Parasyris, Charalambos Chalios, Christos D. Antonopoulos, Spyros Lalis, Nikolaos Bellas, Hans Vandierendonck, and Dimitrios S. Nikolopoulos. A programming model and runtime system for significance-aware energy-efficient computing. *ACM SIGPLAN Notices*, 50(8):275–276, August 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Wimmer:2015:LFK

[2094] Martin Wimmer, Jakob Gruber, Jesper Larsson Träff, and Philippas Tsigas. The lock-free k-LSM relaxed priority queue. *ACM SIGPLAN Notices*, 50(8):277–278, August 2015. CODEN SINODQ. ISSN 0362-1340 (print),

1523-2867 (print), 1558-1160 (electronic).

Saillard:2015:SDV

[2095] Emmanuelle Saillard, Patrick Carribault, and Denis Barthou. Static/dynamic validation of MPI collective communications in multi-threaded context. *ACM SIGPLAN Notices*, 50(8): 279–280, August 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Ramachandran:2015:CFC

[2096] Arunmoezhi Ramachandran and Neeraj Mittal. CASTLE: fast concurrent internal binary search tree using edge-based locking. *ACM SIGPLAN Notices*, 50 (8):281–282, August 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Das:2015:SBP

[2097] Madan Das, Gabriel Southern, and Jose Renau. Section based program analysis to reduce overhead of detecting unsynchronized thread communication. *ACM SIGPLAN Notices*, 50(8): 283–284, August 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Harshvardhan:2015:HAR

[2098] Harshvardhan, Nancy M. Amato, and Lawrence Rauchwerger. A hierarchical approach to reducing communication in parallel graph algorithms. *ACM SIGPLAN Notices*, 50(8):285–286, August 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Chen:2015:TNL

[2099] Yifeng Chen, Xiang Cui, and Hong Mei. Tiles: a new language mechanism for heterogeneous parallelism. *ACM SIGPLAN Notices*, 50(8):287–288, August 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Radoi:2015:WAR

[2100] Cosmin Radoi, Stephan Herhut, Jaswanth Sreeram, and Danny Dig. Are web applications ready for parallelism? *ACM SIGPLAN Notices*, 50 (8):289–290, August 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Bodik:2015:PSO

[2101] Rastislav Bodik. Program synthesis: opportunities for the next decade. *ACM SIGPLAN Notices*, 50(9):1, September 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Rompf:2015:FPS

[2102] Tiark Rompf and Nada Amin. Functional pearl: a SQL to C compiler in 500 lines of code. *ACM SIGPLAN Notices*, 50(9):2–9, September 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Chlipala:2015:OCP

[2103] Adam Chlipala. An optimizing compiler for a purely functional web-application language. *ACM SIGPLAN Notices*, 50(9):10–21, September 2015. CODEN SINODQ. ISSN 0362-1340

(print), 1523-2867 (print), 1558-1160 (electronic).

Bauman:2015:PTJ

[2104] Spenser Bauman, Carl Friedrich Bolz, Robert Hirschfeld, Vasily Kirilichev, Tobias Pape, Jeremy G. Siek, and Sam Tobin-Hochstadt. Pycket: a tracing JIT for a functional language. *ACM SIGPLAN Notices*, 50(9):22–34, September 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Rossberg:2015:CMU

[2105] Andreas Rossberg. 1ML — core and modules united (F-ing first-class modules). *ACM SIGPLAN Notices*, 50(9):35–47, September 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Vazou:2015:BRT

[2106] Niki Vazou, Alexander Bakst, and Ranjit Jhala. Bounded refinement types. *ACM SIGPLAN Notices*, 50(9):48–61, September 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Matsuda:2015:ABP

[2107] Kazutaka Matsuda and Meng Wang. Applicative bidirectional programming with lenses. *ACM SIGPLAN Notices*, 50(9):62–74, September 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Pombrio:2015:HRC

[2108] Justin Pombrio and Shriram Krishnamurthi. Hygienic resugaring of compositional desugaring. *ACM SIGPLAN Notices*, 50(9):75–87, September 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Geneves:2015:XST

[2109] Pierre Genevès and Nils Gesbert. XQuery and static typing: tackling the problem of backward axes. *ACM SIGPLAN Notices*, 50(9):88–100, September 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Bowman:2015:NF

[2110] William J. Bowman and Amal Ahmed. Noninterference for free. *ACM SIGPLAN Notices*, 50(9):101–113, September 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Gaboardi:2015:ACL

[2111] Marco Gaboardi and Romain Péchoux. Algebras and coalgebras in the light affine Lambda calculus. *ACM SIGPLAN Notices*, 50(9):114–126, September 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Downen:2015:SSR

[2112] Paul Downen, Philip Johnson-Freyd, and Zena M. Ariola. Structures for structural recursion. *ACM SIGPLAN Notices*, 50(9):127–139, September 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Danner:2015:DCS

[2113] Norman Danner, Daniel R. Licata, and Ramyaa Ramyaa. Denotational cost se-

mantics for functional languages with inductive types. *ACM SIGPLAN Notices*, 50(9):140–151, September 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Avanzini:2015:ACF

[2114] Martin Avanzini, Ugo Dal Lago, and Georg Moser. Analysing the complexity of functional programs: higher-order meets first-order. *ACM SIGPLAN Notices*, 50(9):152–164, September 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Sheeran:2015:FPH

[2115] Mary Sheeran. Functional programming and hardware design: still interesting after all these years. *ACM SIGPLAN Notices*, 50(9):165, September 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Neis:2015:PCV

[2116] Georg Neis, Chung-Kil Hur, Jan-Oliver Kaiser, Craig McLaughlin, Derek Dreyer, and Viktor Vafeiadis. Pilsner: a compositionally verified compiler for a higher-order imperative language. *ACM SIGPLAN Notices*, 50(9):166–178, September 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Ziliani:2015:UAC

[2117] Beta Ziliani and Matthieu Sozeau. A unification algorithm for Coq featuring universe polymorphism and overloading. *ACM SIGPLAN Notices*, 50 (9):179–191, September 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Blanchette:2015:FEC

[2118] Jasmin Christian Blanchette, Andrei Popescu, and Dmitriy Traytel. Foundational extensible corecursion: a proof assistant perspective. *ACM SIGPLAN Notices*, 50(9):192–204, September 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Steuwer:2015:GPP

[2119] Michel Steuwer, Christian Fensch, Sam Lindley, and Christophe Dubach. Generating performance portable code using rewrite rules: from high-level functional expressions to high-performance OpenCL code. *ACM SIGPLAN Notices*, 50(9):205–217, September 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Newton:2015:ALF

[2120] Ryan R. Newton, Peter P. Fogg, and Ali Varamesh. Adaptive lock-free maps: purely-functional to scalable. *ACM SIGPLAN Notices*, 50(9):218–229, September 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Le:2015:PAT

[2121] Matthew Le and Matthew Fluet. Partial aborts for transactions via first-class continuations. *ACM SIGPLAN Notices*, 50(9):230–242, September 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Scherer:2015:WST

[2122] Gabriel Scherer and Didier Rémy. Which simple types have a unique inhabitant? *ACM SIGPLAN Notices*, 50(9):243–255, September 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Dunfield:2015:EEO

[2123] Joshua Dunfield. Elaborating evaluation-order polymorphism. *ACM SIGPLAN Notices*, 50(9):256–268, September 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Rendel:2015:ARL

[2124] Tillmann Rendel, Julia Trieflinger, and Klaus Ostermann. Automatic refunctionalization to a language with copattern matching: with applications to the expression problem. *ACM SIGPLAN Notices*, 50(9):269–279, September 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Russo:2015:FPT

[2125] Alejandro Russo. Functional pearl: two can keep a secret, if one of them uses Haskell. *ACM SIGPLAN Notices*, 50(9):280–288, September 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Buiras:2015:HMS

[2126] Pablo Buiras, Dimitrios Vytiniotis, and Alejandro Russo. HLIO: mixing static and dynamic typing for information-flow control in Haskell. *ACM SIGPLAN Notices*, 50(9):289–301, September 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

vanderPloeg:2015:PPF

[2127] Atze van der Ploeg and Koen Claessen. Practical principled FRP: forget the past, change the future, FRPNow! *ACM SIGPLAN Notices*, 50(9):302–314, September 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Bahr:2015:CSM

[2128] Patrick Bahr, Jost Berthold, and Martin Elsman. Certified symbolic management of financial multi-party contracts. *ACM SIGPLAN Notices*, 50(9):315–327, September 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Smolka:2015:FCN

[2129] Steffen Smolka, Spiridon Eliopoulos, Nate Foster, and Arjun Guha. A fast compiler for NetKAT. *ACM SIGPLAN Notices*, 50(9):328–341, September 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Stucki:2015:RVP

[2130] Nicolas Stucki, Tiark Rompf, Vlad Ureche, and Phil Bagwell. RRB vector: a practical general purpose immutable sequence. *ACM SIGPLAN Notices*, 50 (9):342–354, September 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Jaskelioff:2015:FPS

[2131] Mauro Jaskelioff and Exequiel Rivas. Functional pearl: a smart view on datatypes. *ACM SIGPLAN Notices*, 50(9):355–361, September 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Yang:2015:ECC

[2132] Edward Z. Yang, Giovanni Campagna, Ömer S. Agacan, Ahmed El-Hassany, Abhishek Kulkarni, and Ryan R. Newton. Efficient communication and collection with compact normal forms. *ACM SIGPLAN Notices*, 50(9):362–374, September 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Keil:2015:BAH

[2133] Matthias Keil and Peter Thiemann. Blame assignment for higher-order contracts with intersection and union. *ACM SIGPLAN Notices*, 50(9):375–386, September 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Swords:2015:ECM

[2134] Cameron Swords, Amr Sabry, and Sam Tobin-Hochstadt. Expressing contract monitors as patterns of communication. *ACM SIGPLAN Notices*, 50(9):387–399, September 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Zhu:2015:LRT

[2135] He Zhu, Aditya V. Nori, and Suresh Jagannathan. Learning refinement types. *ACM SIGPLAN Notices*, 50(9):400–411, September 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Pavlinovic:2015:PSB

[2136] Zvonimir Pavlinovic, Tim King, and Thomas Wies. Practical SMT-based type error localization. *ACM SIGPLAN Notices*, 50(9):412–423, September 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Karachalias:2015:GMT

[2137] Georgios Karachalias, Tom Schrijvers, Dimitrios Vytiniotis, and Simon Peyton Jones. GADTs meet their match: pattern-matching warnings that account for GADTs, guards, and laziness. *ACM SIGPLAN Notices*, 50(9):424–436, September 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Hague:2015:DRC

[2138] Matthew Hague, Anthony W. Lin, and C.-H. Luke Ong. Detecting redundant CSS rules in HTML5 applications: a tree rewriting approach. *ACM SIGPLAN Notices*, 50(10):1–19, October 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Demsky:2015:SSD

[2139] Brian Demsky and Patrick Lam. SATCheck: SAT-directed stateless model checking for SC and TSO. *ACM SIGPLAN Notices*, 50(10):20–36, October 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Kuraj:2015:PES

[2140] Ivan Kuraj, Viktor Kuncak, and Daniel Jackson. Programming with enumerable sets of structures. *ACM SIGPLAN Notices*, 50(10):37–56, October 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Jensen:2015:SMC

[2141] Casper S. Jensen, Anders Møller, Veselin Raychev, Dimitar Dimitrov, and Martin Vechev. Stateless model checking of event-driven applications. *ACM SIGPLAN Notices*, 50(10):57–73, October 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Hottelier:2015:SLE

[2142] Thibaud Hottelier and Rastislav Bodik. Synthesis of layout engines from relational constraints. *ACM SIGPLAN Notices*, 50(10):74–88, October 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Erdweg:2015:SOI

[2143] Sebastian Erdweg, Moritz Lichter, and Manuel Weiel. A sound and optimal incremental build system with dynamic dependencies. *ACM SIGPLAN Notices*, 50(10):89–106, October 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Polozov:2015:FFI

[2144] Oleksandr Polozov and Sumit Gulwani. FlashMeta: a framework for inductive program synthesis. *ACM SIGPLAN Notices*, 50(10):107–126, October 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Zhang:2015:SYB

[2145] Haoyuan Zhang, Zewei Chu, Bruno C. d. S. Oliveira, and Tijs van der Storm. Scrap your boilerplate with object algebras. *ACM SIGPLAN Notices*, 50(10): 127–146, October 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Sharma:2015:CCS

[2146] Rahul Sharma, Eric Schkufza, Berkeley Churchill, and Alex Aiken. Conditionally correct superoptimization. *ACM SIGPLAN Notices*, 50(10):147–162, October 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Blackshear:2015:SCF

[2147] Sam Blackshear, Bor-Yuh Evan Chang, and Manu Sridharan. Selective control-flow abstraction via jumping. *ACM SIGPLAN Notices*, 50(10):163–182, October 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Madhavan:2015:AGC

[2148] Ravichandhran Madhavan, Mikaël Mayer, Sumit Gulwani, and Viktor Kuncak. Automating grammar comparison. *ACM SIGPLAN Notices*, 50 (10):183–200, October 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Ntzik:2015:RAP

[2149] Gian Ntzik and Philippa Gardner. Reasoning about the POSIX file system: local update and global pathnames. *ACM SIGPLAN Notices*, 50(10):201–220, October 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Ou:2015:AAI

[2150] Peizhao Ou and Brian Demsky. AutoMO: automatic inference of memory order parameters for C/C++11. *ACM SIGPLAN Notices*, 50(10):221–240, October 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Biswas:2015:VES

[2151] Swarnendu Biswas, Minjia Zhang, Michael D. Bond, and Brandon Lucia. Valor: efficient, software-only region conflict exceptions. *ACM SIGPLAN Notices*, 50(10):241–259, October 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Cohen:2015:AMR

[2152] Nachshon Cohen and Erez Petrank. Automatic memory reclamation for lock-free data structures. *ACM SIGPLAN Notices*, 50(10):260–279, October 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Lopez:2015:PBV

[2153] Hugo A. López, Eduardo R. B. Marques, Francisco Martins, Nicholas Ng, César Santos, Vasco Thudichum Vasconcelos, and Nobuko Yoshida. Protocol-based verification of message-passing parallel programs. *ACM SIGPLAN Notices*, 50(10):280–298, October 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Bastani:2015:IVA

[2154] Osbert Bastani, Saswat Anand, and Alex Aiken. Interactively verifying absence of explicit information flows in Android apps. *ACM SIGPLAN Notices*, 50(10):299–315, October 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Brutschy:2015:SGD

[2155] Lucas Brutschy, Pietro Ferrara, Omer Tripp, and Marco Pistoia. ShamDroid: gracefully degrading functionality in the presence of limited resource access. *ACM SIGPLAN Notices*, 50(10):316–331, October 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Bielik:2015:SRD

[2156] Pavol Bielik, Veselin Raychev, and Martin Vechev. Scalable race detection for Android applications. *ACM SIGPLAN Notices*, 50(10):332–348, October 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Hu:2015:VYL

[2157] Yongjian Hu, Tanzirul Azim, and Iulian Neamtiu. Versatile yet lightweight record-and-replay for Android. *ACM SIGPLAN Notices*, 50(10):349–366, October 2015. CODEN SINODQ.

ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Bender:2015:DFI

[2158] John Bender, Mohsen Lesani, and Jens Palsberg. Declarative fence insertion. *ACM SIGPLAN Notices*, 50(10):367–385, October 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Le:2015:FDC

[2159] Vu Le, Chengnian Sun, and Zhendong Su. Finding deep compiler bugs via guided stochastic program mutation. *ACM SIGPLAN Notices*, 50(10): 386–399, October 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Wang:2015:VAR

[2160] Haichuan Wang, David Padua, and Peng Wu. Vectorization of Apply to reduce interpretation overhead of R. *ACM SIGPLAN Notices*, 50(10):400–415, October 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Gvero:2015:SJE

[2161] Tihomir Gvero and Viktor Kuncak. Synthesizing Java expressions from free-form queries. *ACM SIGPLAN Notices*, 50(10):416–432, October 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Zheng:2015:APP

[2162] Yudi Zheng, Lubomír Bulej, and Walter Binder. Accurate profiling in the presence of dynamic compilation. *ACM SIGPLAN Notices*, 50(10):433–450, October 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Aigner:2015:FMS

[2163] Martin Aigner, Christoph M. Kirsch, Michael Lippautz, and Ana Sokolova. Fast, multicore-scalable, low-fragmentation memory allocation through large virtual memory and global data structures. *ACM SIGPLAN Notices*, 50(10): 451–469, October 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Boston:2015:PTI

[2164] Brett Boston, Adrian Sampson, Dan Grossman, and Luis Ceze. Probability type inference for flexible approximate programming. *ACM SIGPLAN Notices*, 50(10):470–487, October 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Jantz:2015:CLM

[2165] Michael R. Jantz, Forrest J. Robinson, Prasad A. Kulkarni, and Kshitij A. Doshi. Cross-layer memory management for managed language applications. *ACM SIGPLAN Notices*, 50(10): 488–504, October 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Madsen:2015:SAE

[2166] Magnus Madsen, Frank Tip, and Ondrej Lhoták. Static analysis of event-driven Node.js JavaScript applications. *ACM SIGPLAN Notices*, 50(10):505–519, October 2015. CODEN SIN-

ODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Feng:2015:EQD

[2167] Yu Feng, Xinyu Wang, Isil Dillig, and Calvin Lin. EXPLORER : query- and demand-driven exploration of interprocedural control flow properties. *ACM SIGPLAN Notices*, 50(10):520–534, October 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Dietrich:2015:GSE

[2168] Jens Dietrich, Nicholas Hollingum, and Bernhard Scholz. Giga-scale exhaustive points-to analysis for Java in under a minute. *ACM SIGPLAN Notices*, 50(10):535–551, October 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Darais:2015:GTM

[2169] David Darais, Matthew Might, and David Van Horn. Galois transformers and modular abstract interpreters: reusable metatheory for program analysis. *ACM SIGPLAN Notices*, 50(10): 552–571, October 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Oh:2015:LSA

[2170] Hakjoo Oh, Hongseok Yang, and Kwangkeun Yi. Learning a strategy for adapting a program analysis via Bayesian optimisation. *ACM SIGPLAN Notices*, 50(10):572–588, October 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Alves:2015:RPD

[2171] Péricles Alves, Fabian Gruber, Johannes Doerfert, Alexandros Lamprineas, Tobias Grosser, Fabrice Rastello, and Fernando Magno Quintão Pereira. Runtime pointer disambiguation. *ACM SIGPLAN Notices*, 50(10): 589–606, October 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Toffola:2015:PPY

[2172] Luca Della Toffola, Michael Pradel, and Thomas R. Gross. Performance problems you can fix: a dynamic analysis of memoization opportunities. *ACM SIGPLAN Notices*, 50(10):607–622, October 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Lee:2015:RRA

[2173] Wen-Chuan Lee, Tao Bao, Yunhui Zheng, Xiangyu Zhang, Keval Vora, and Rajiv Gupta. RAIVE: runtime assessment of floating-point instability by vectorization. *ACM SIGPLAN Notices*, 50(10):623–638, October 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Fu:2015:ABE

[2174] Zhoulai Fu, Zhaojun Bai, and Zhendong Su. Automated backward error analysis for numerical code. *ACM SIGPLAN Notices*, 50(10):639–654, October 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Voelter:2015:UCL

[2175] Markus Voelter, Arie van Deursen, Bernd Kolb, and Stephan Eberle. Using c language extensions for developing embedded software: a case study. *ACM SIGPLAN Notices*, 50(10):655–674, October 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Lopes:2015:HSA

[2176] Cristina V. Lopes and Joel Ossher. How scale affects structure in Java programs. *ACM SIGPLAN Notices*, 50 (10):675–694, October 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Mastrangelo:2015:UYO

[2177] Luis Mastrangelo, Luca Ponzanelli, Andrea Mocci, Michele Lanza, Matthias Hauswirth, and Nathaniel Nystrom. Use at your own risk: the Java unsafe API in the wild. *ACM SIGPLAN Notices*, 50(10):695–710, October 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Achour:2015:ACO

[2178] Sara Achour and Martin C. Rinard. Approximate computation with outlier detection in Topaz. *ACM SIGPLAN Notices*, 50(10):711–730, October 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Wickerson:2015:RSP

[2179] John Wickerson, Mark Batty, Bradford M. Beckmann, and Alastair F. Donaldson. Remote-scope promotion: clarified, rectified, and verified. *ACM SIGPLAN Notices*, 50(10):731–747, October 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Hammer:2015:ICN

[2180] Matthew A. Hammer, Joshua Dunfield, Kyle Headley, Nicholas Labich, Jeffrey S. Foster, Michael Hicks, and David Van Horn. Incremental computation with names. *ACM SIGPLAN Notices*, 50(10):748–766, October 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Felgentreff:2015:CBC

[2181] Tim Felgentreff, Todd Millstein, Alan Borning, and Robert Hirschfeld. Checks and balances: constraint solving without surprises in object-constraint programming languages. *ACM SIGPLAN Notices*, 50(10):767–782, October 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Steindorfer:2015:OHA

[2182] Michael J. Steindorfer and Jurgen J. Vinju. Optimizing hash-array mapped tries for fast and lean immutable JVM collections. *ACM SIGPLAN Notices*, 50(10):783–800, October 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Ureche:2015:AAH

[2183] Vlad Ureche, Aggelos Biboudis, Yannis Smaragdakis, and Martin Odersky.

Automating ad hoc data representation transformations. *ACM SIGPLAN Notices*, 50(10):801–820, October 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Marr:2015:TVP

[2184] Stefan Marr and Stéphane Ducasse. Tracing vs. partial evaluation: comparing meta-compilation approaches for self-optimizing interpreters. *ACM SIGPLAN Notices*, 50(10):821–839, October 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Upadhyaya:2015:EML

[2185] Ganesha Upadhyaya and Hridesh Rajan. Effectively mapping linguistic abstractions for message-passing concurrency to threads on the Java Virtual Machine. *ACM SIGPLAN Notices*, 50(10):840–859, October 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Srinivasan:2015:PEM

[2186] Venkatesh Srinivasan and Thomas Reps. Partial evaluation of machine code. *ACM SIGPLAN Notices*, 50(10): 860–879, October 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Erdweg:2015:CCF

[2187] Sebastian Erdweg, Oliver Bracevac, Edlira Kuci, Matthias Krebs, and Mira Mezini. A co-contextual formulation of type rules and its application to incremental type checking. *ACM SIGPLAN Notices*, 50(10):880–897, October 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Brandauer:2015:DDF

[2188] Stephan Brandauer, Dave Clarke, and Tobias Wrigstad. Disjointness domains for fine-grained aliasing. *ACM SIGPLAN Notices*, 50(10):898–916, October 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Crafa:2015:CAT

[2189] Silvia Crafa and Luca Padovani. The chemical approach to typestate-oriented programming. *ACM SIGPLAN Notices*, 50(10):917–934, October 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Toro:2015:CGP

[2190] Matías Toro and Éric Tanter. Customizable gradual polymorphic effects for Scala. *ACM SIGPLAN Notices*, 50 (10):935–953, October 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Kim:2015:CPM

[2191] Sang-Hoon Kim, Sejun Kwon, Jin-Soo Kim, and Jinkyu Jeong. Controlling physical memory fragmentation in mobile systems. *ACM SIGPLAN Notices*, 50(11):1–14, November 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Hussein:2015:DRM

[2192] Ahmed Hussein, Antony L. Hosking, Mathias Payer, and Christopher A. Vick. Don't race the memory bus: taming the GC leadfoot. *ACM SIGPLAN Notices*, 50(11):15–27, November 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Cohen:2015:DSA

[2193] Nachshon Cohen and Erez Petrank. Data structure aware garbage collector. *ACM SIGPLAN Notices*, 50(11): 28–40, November 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Kuszmaul:2015:SSF

[2194] Bradley C. Kuszmaul. SuperMalloc: a super fast multithreaded `malloc` for 64-bit machines. *ACM SIGPLAN Notices*, 50(11):41–55, November 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Osterlund:2015:CCU

[2195] Erik Österlund and Welf Löwe. Concurrent compaction using a field pinning protocol. *ACM SIGPLAN Notices*, 50(11):56–69, November 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Lin:2015:SGU

[2196] Yi Lin, Kunshan Wang, Stephen M. Blackburn, Antony L. Hosking, and Michael Norrish. Stop and go: understanding yieldpoint behavior. *ACM SIGPLAN Notices*, 50(11):70–80, November 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Stancu:2015:SEH

[2197] Codrut Stancu, Christian Wimmer, Stefan Brunthaler, Per Larsen, and Michael Franz. Safe and efficient hybrid memory management for Java. *ACM SIGPLAN Notices*, 50(11):81–92, November 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Miranda:2015:PRB

[2198] Eliot Miranda and Clément Béra. A partial read barrier for efficient support of live object-oriented programming. *ACM SIGPLAN Notices*, 50(11): 93–104, November 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Clifford:2015:MMD

[2199] Daniel Clifford, Hannes Payer, Michael Stanton, and Ben L. Titzer. Memento mori: dynamic allocation-site-based optimizations. *ACM SIGPLAN Notices*, 50(11):105–117, November 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Shidal:2015:RTC

[2200] Jonathan Shidal, Ari J. Spilo, Paul T. Scheid, Ron K. Cytron, and Krishna M. Kavi. Recycling trash in cache. *ACM SIGPLAN Notices*, 50(11):118–130, November 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Cutler:2015:RPT

[2201] Cody Cutler and Robert Morris. Reducing pause times with clustered collection. *ACM SIGPLAN Notices*, 50 (11):131–142, November 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Cameron:2015:JFE

[2202] Callum Cameron, Jeremy Singer, and David Vengerov. The judgment of FORSETI: economic utility for dynamic heap sizing of multiple runtimes. *ACM SIGPLAN Notices*, 50(11):143–156, November 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Diatchki:2015:IHT

[2203] Iavor S. Diatchki. Improving Haskell types with SMT. *ACM SIGPLAN Notices*, 50(12):1–10, December 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Gundry:2015:TPU

[2204] Adam Gundry. A typechecker plugin for units of measure: domain-specific constraint solving in GHC Haskell. *ACM SIGPLAN Notices*, 50(12):11–22, December 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Farmer:2015:RHT

[2205] Andrew Farmer, Neil Sculthorpe, and Andy Gill. Reasoning with the HERMIT: tool support for equational reasoning on GHC core programs. *ACM SIGPLAN Notices*, 50(12):23–34, December 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Breitner:2015:FPC

[2206] Joachim Breitner. Formally proving a compiler transformation safe. *ACM SIGPLAN Notices*, 50(12):35–46, December 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Perez:2015:BGG

[2207] Ivan Perez and Henrik Nilsson. Bridging the GUI gap with reactive values and relations. *ACM SIGPLAN Notices*, 50(12):47–58, December 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Gill:2015:RMD

[2208] Andy Gill, Neil Sculthorpe, Justin Dawson, Aleksander Eskilson, Andrew Farmer, Mark Grebe, Jeffrey Rosenbluth, Ryan Scott, and James Stanton. The remote monad design pattern. *ACM SIGPLAN Notices*, 50(12): 59–70, December 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Morris:2015:VV

[2209] J. Garrett Morris. Variations on variants. *ACM SIGPLAN Notices*, 50(12): 71–81, December 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Oliveira:2015:MRM

[2210] Bruno C. d. S. Oliveira, Shin-Cheng Mu, and Shu-Hung You. Modular reifi-

able matching: a list-of-functors approach to two-level types. *ACM SIGPLAN Notices*, 50(12):82–93, December 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Kiselyov:2015:FMM

[2211] Oleg Kiselyov and Hiromi Ishii. Freer monads, more extensible effects. *ACM SIGPLAN Notices*, 50(12):94–105, December 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Foner:2015:FPG

[2212] Kenneth Foner. Functional pearl: getting a quick fix on comonads. *ACM SIGPLAN Notices*, 50(12):106–117, December 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Stolarek:2015:ITF

[2213] Jan Stolarek, Simon Peyton Jones, and Richard A. Eisenberg. Injective type families for Haskell. *ACM SIGPLAN Notices*, 50(12):118–128, December 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Serrano:2015:TFC

[2214] Alejandro Serrano, Jurriaan Hage, and Patrick Bahr. Type families with class, type classes with family. *ACM SIGPLAN Notices*, 50(12):129–140, December 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Walker:2015:DFC

[2215] Michael Walker and Colin Runciman. Déjà Fu: a concurrency testing library for Haskell. *ACM SIGPLAN Notices*, 50(12):141–152, December 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Trilla:2015:IIP

[2216] José Manuel Calderón Trilla and Colin Runciman. Improving implicit parallelism. *ACM SIGPLAN Notices*, 50 (12):153–164, December 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Scibior:2015:PPP

[2217] Adam 'Scibior, Zoubin Ghahramani, and Andrew D. Gordon. Practical probabilistic programming with monads. *ACM SIGPLAN Notices*, 50(12): 165–176, December 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Polakow:2015:EFL

[2218] Jeff Polakow. Embedding a full linear lambda calculus in Haskell. *ACM SIGPLAN Notices*, 50(12):177–188, December 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Elliott:2015:GFI

[2219] Trevor Elliott, Lee Pike, Simon Winwood, Pat Hickey, James Bielman, Jamey Sharp, Eric Seidel, and John Launchbury. Guilt free Ivory. *ACM SIGPLAN Notices*, 50(12):189–200,

December 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

McDonell:2015:TSR

[2220] Trevor L. McDonell, Manuel M. T. Chakravarty, Vinod Grover, and Ryan R. Newton. Type-safe runtime code generation: accelerate to LLVM. *ACM SIGPLAN Notices*, 50(12):201–212, December 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

McKinley:2016:PWU

[2221] Kathryn S. McKinley. Programming the world of uncertain things (keynote). *ACM SIGPLAN Notices*, 51(1):1–2, January 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Murray:2016:SRC

[2222] Richard M. Murray. Synthesis of reactive controllers for hybrid systems (keynote). *ACM SIGPLAN Notices*, 51(1):3, January 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Walker:2016:CPL

[2223] David Walker. Confluences in programming languages research (keynote). *ACM SIGPLAN Notices*, 51(1):4, January 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Brown:2016:BTN

[2224] Matt Brown and Jens Palsberg. Breaking through the normalization barrier: a self-interpreter for F_{omega}. *ACM SIGPLAN Notices*, 51(1):5–17, January 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Altenkirch:2016:TTT

[2225] Thorsten Altenkirch and Ambrus Kaposi. Type theory in type theory using quotient inductive types. *ACM SIGPLAN Notices*, 51(1):18–29, January 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Cai:2016:SFE

[2226] Yufei Cai, Paolo G. Giarrusso, and Klaus Ostermann. System F_{omega} with equirecursive types for datatype-generic programming. *ACM SIGPLAN Notices*, 51(1):30–43, January 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Curien:2016:TER

[2227] Pierre-Louis Curien, Marcelo Fiore, and Guillaume Munch-Maccagnoni. A theory of effects and resources: adjunction models and polarised calculi. *ACM SIGPLAN Notices*, 51(1):44–56, January 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Murase:2016:TVH

[2228] Akihiro Murase, Tachio Terauchi, Naoki Kobayashi, Ryosuke Sato, and Hiroshi Unno. Temporal verification of higher-order functional programs. *ACM SIGPLAN Notices*, 51(1):57–68, January 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Plotkin:2016:SNV

[2229] Gordon D. Plotkin, Nikolaj Bjørner, Nuno P. Lopes, Andrey Rybalchenko, and George Varghese. Scaling network verification using symmetry and surgery. *ACM SIGPLAN Notices*, 51 (1):69–83, January 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Brotherston:2016:MCS

[2230] James Brotherston, Nikos Gorogiannis, Max Kanovich, and Reuben Rowe. Model checking for symbolic-heap separation logic with inductive predicates. *ACM SIGPLAN Notices*, 51(1):84–96, January 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Koskinen:2016:RCR

[2231] Eric Koskinen and Junfeng Yang. Reducing crash recoverability to reachability. *ACM SIGPLAN Notices*, 51(1): 97–108, January 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Zhang:2016:QGM

[2232] Xin Zhang, Ravi Mangal, Aditya V. Nori, and Mayur Naik. Query-guided maximum satisfiability. *ACM SIGPLAN Notices*, 51(1):109–122, January 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Lin:2016:SSW

[2233] Anthony W. Lin and Pablo Barceló. String solving with word equations and transducers: towards a logic for analysing mutation XSS. *ACM SIGPLAN Notices*, 51(1):123–136, January 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Cardelli:2016:SCD

[2234] Luca Cardelli, Mirco Tribastone, Max Tschaikowski, and Andrea Vandin. Symbolic computation of differential equivalences. *ACM SIGPLAN Notices*, 51(1):137–150, January 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Hague:2016:UDC

[2235] Matthew Hague, Jonathan Kochems, and C.-H. Luke Ong. Unboundedness and downward closures of higher-order pushdown automata. *ACM SIGPLAN Notices*, 51(1):151–163, January 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Devriese:2016:FAC

[2236] Dominique Devriese, Marco Patrignani, and Frank Piessens. Fully-abstract compilation by approximate back-translation. *ACM SIGPLAN Notices*, 51(1):164–177, January 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Kang:2016:LVS

[2237] Jeehoon Kang, Yoonseung Kim, Chung-Kil Hur, Derek Dreyer, and Viktor Vafeiadis. Lightweight verification of separate compilation. *ACM SIGPLAN Notices*, 51(1):178–190, January 2016. CODEN SINODQ. ISSN

0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Robbins:2016:MMS

[2238] Ed Robbins, Andy King, and Tom Schrijvers. From MinX to MinC: semantics-driven decompilation of recursive datatypes. *ACM SIGPLAN Notices*, 51(1):191–203, January 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Lorenzen:2016:STD

[2239] Florian Lorenzen and Sebastian Erdweg. Sound type-dependent syntactic language extension. *ACM SIGPLAN Notices*, 51(1):204–216, January 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Padon:2016:DII

[2240] Oded Padon, Neil Immerman, Sharon Shoham, Aleksandr Karbyshev, and Mooly Sagiv. Decidability of inferring inductive invariants. *ACM SIGPLAN Notices*, 51(1):217–231, January 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Lavaee:2016:HDP

[2241] Rahman Lavaee. The hardness of data packing. *ACM SIGPLAN Notices*, 51(1):232–242, January 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Gimenez:2016:CI

[2242] Stéphane Gimenez and Georg Moser. The complexity of interaction. *ACM SIGPLAN Notices*, 51(1):243–255, January 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Swamy:2016:DTM

[2243] Nikhil Swamy, Catalin Hritcu, Chantal Keller, Aseem Rastogi, Antoine Delignat-Lavaud, Simon Forest, Karthikeyan Bhargavan, Cédric Fournet, Pierre-Yves Strub, Markulf Kohlweiss, Jean-Karim Zinzindohoue, and Santiago Zanella-Béguelin. Dependent types and multi-monadic effects in F*. *ACM SIGPLAN Notices*, 51(1): 256–270, January 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Borgstrom:2016:FRF

[2244] Johannes Borgström, Andrew D. Gordon, Long Ouyang, Claudio Russo, Adam 'Scibior, and Marcin Szymczak. Fabular: regression formulas as probabilistic programming. *ACM SIGPLAN Notices*, 51(1):271–283, January 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Grathwohl:2016:KCN

[2245] Bjørn Bugge Grathwohl, Fritz Henglein, Ulrik Terp Rasmussen, Kristoffer Aalund Søholm, and Sebastian Paaske Tørholm. Kleenex: compiling nondeterministic transducers to deterministic streaming transducers. *ACM SIGPLAN Notices*, 51(1):284–297, January 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Long:2016:APG

[2246] Fan Long and Martin Rinard. Automatic patch generation by learning correct code. *ACM SIGPLAN Notices*, 51(1):298–312, January 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Katz:2016:ETB

[2247] Omer Katz, Ran El-Yaniv, and Eran Yahav. Estimating types in binaries using predictive modeling. *ACM SIGPLAN Notices*, 51(1):313–326, January 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Chatterjee:2016:AAQ

[2248] Krishnendu Chatterjee, Hongfei Fu, Petr Novotný, and Rouzbeh Hasheminezhad. Algorithmic analysis of qualitative and quantitative termination problems for affine probabilistic programs. *ACM SIGPLAN Notices*, 51(1): 327–342, January 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Singh:2016:TSD

[2249] Rishabh Singh and Sumit Gulwani. Transforming spreadsheet data types using examples. *ACM SIGPLAN Notices*, 51(1):343–356, January 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Lesani:2016:CCC

[2250] Mohsen Lesani, Christian J. Bell, and Adam Chlipala. Chapar: certified causally consistent distributed key-value stores. *ACM SIGPLAN Notices*, 51(1):357–370, January 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Gotsman:2016:CIS

[2251] Alexey Gotsman, Hongseok Yang, Carla Ferreira, Mahsa Najafzadeh, and Marc Shapiro. 'Cause I'm strong enough': Reasoning about consistency choices in distributed systems. *ACM SIGPLAN Notices*, 51(1):371–384, January 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Liang:2016:PLC

[2252] Hongjin Liang and Xinyu Feng. A program logic for concurrent objects under fair scheduling. *ACM SIGPLAN Notices*, 51(1):385–399, January 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Dragoi:2016:PPS

[2253] Cezara Dragoi, Thomas A. Henzinger, and Damien Zufferey. PSync: a partially synchronous language for fault-tolerant distributed algorithms. *ACM SIGPLAN Notices*, 51(1):400–415, January 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Chen:2016:PTI

[2254] Sheng Chen and Martin Erwig. Principal type inference for GADTs. *ACM SIGPLAN Notices*, 51(1):416–428, January 2016. CODEN SINODQ. ISSN

0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Garcia:2016:AGT

[2255] Ronald Garcia, Alison M. Clark, and Éric Tanter. Abstracting gradual typing. *ACM SIGPLAN Notices*, 51(1): 429–442, January 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Cimini:2016:GMA

[2256] Matteo Cimini and Jeremy G. Siek. The gradualizer: a methodology and algorithm for generating gradual type systems. *ACM SIGPLAN Notices*, 51 (1):443–455, January 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Takikawa:2016:SGT

[2257] Asumu Takikawa, Daniel Feltey, Ben Greenman, Max S. New, Jan Vitek, and Matthias Felleisen. Is sound gradual typing dead? *ACM SIGPLAN Notices*, 51(1):456–468, January 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Octeau:2016:CSA

[2258] Damien Octeau, Somesh Jha, Matthew Dering, Patrick McDaniel, Alexandre Bartel, Li Li, Jacques Klein, and Yves Le Traon. Combining static analysis with probabilistic models to enable market-scale Android inter-component analysis. *ACM SIGPLAN Notices*, 51 (1):469–484, January 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Grigore:2016:ARG

[2259] Radu Grigore and Hongseok Yang. Abstraction refinement guided by a learnt probabilistic model. *ACM SIGPLAN Notices*, 51(1):485–498, January 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Garg:2016:LIU

[2260] Pranav Garg, Daniel Neider, P. Madhusudan, and Dan Roth. Learning invariants using decision trees and implication counterexamples. *ACM SIGPLAN Notices*, 51(1):499–512, January 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Emmi:2016:SAD

[2261] Michael Emmi and Constantin Enea. Symbolic abstract data type inference. *ACM SIGPLAN Notices*, 51(1):513–525, January 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Bhaskaracharya:2016:SIA

[2262] Somashekaracharya G. Bhaskaracharya, Uday Bondhugula, and Albert Cohen. SMO: an integrated approach to intra-array and inter-array storage optimization. *ACM SIGPLAN Notices*, 51(1): 526–538, January 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Bao:2016:PDV

[2263] Wenlei Bao, Sriram Krishnamoorthy, Louis-Noël Pouchet, Fabrice Rastello, and P. Sadayappan. PolyCheck: dynamic verification of iteration space

transformations on affine programs. *ACM SIGPLAN Notices*, 51(1):539–554, January 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Andrysco:2016:PFP

[2264] Marc Andrysco, Ranjit Jhala, and Sorin Lerner. Printing floating-point numbers: a faster, always correct method. *ACM SIGPLAN Notices*, 51 (1):555–567, January 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Orchard:2016:ESS

[2265] Dominic Orchard and Nobuko Yoshida. Effects as sessions, sessions as effects. *ACM SIGPLAN Notices*, 51(1):568–581, January 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Jia:2016:MBA

[2266] Limin Jia, Hannah Gommerstadt, and Frank Pfenning. Monitors and blame assignment for higher-order session types. *ACM SIGPLAN Notices*, 51(1): 582–594, January 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Sangiorgi:2016:EBP

[2267] Davide Sangiorgi and Valeria Vignudelli. Environmental bisimulations for probabilistic higher-order languages. *ACM SIGPLAN Notices*, 51 (1):595–607, January 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Flur:2016:MAA

[2268] Shaked Flur, Kathryn E. Gray, Christopher Pulte, Susmit Sarkar, Ali Sezgin, Luc Maranget, Will Deacon, and Peter Sewell. Modelling the ARMv8 architecture, operationally: concurrency and ISA. *ACM SIGPLAN Notices*, 51(1):608–621, January 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Pichon-Pharabod:2016:CSR

[2269] Jean Pichon-Pharabod and Peter Sewell. A concurrency semantics for relaxed atomics that permits optimisation and avoids thin-air executions. *ACM SIGPLAN Notices*, 51(1):622–633, January 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Batty:2016:OSA

[2270] Mark Batty, Alastair F. Donaldson, and John Wickerson. Overhauling SC atomics in C11 and OpenCL. *ACM SIGPLAN Notices*, 51(1):634–648, January 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Lahav:2016:TRA

[2271] Ori Lahav, Nick Giannarakis, and Viktor Vafeiadis. Taming release-acquire consistency. *ACM SIGPLAN Notices*, 51(1):649–662, January 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Reps:2016:NPA

[2272] Thomas Reps, Emma Turetsky, and Prathmesh Prabhu. Newtonian pro-

gram analysis via tensor product. *ACM SIGPLAN Notices*, 51(1):663–677, January 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Wu:2016:CEA

[2273] Rongxin Wu, Xiao Xiao, Shing-Chi Cheung, Hongyu Zhang, and Charles Zhang. Casper: an efficient approach to call trace collection. *ACM SIGPLAN Notices*, 51(1):678–690, January 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Gilray:2016:PCF

[2274] Thomas Gilray, Steven Lyde, Michael D. Adams, Matthew Might, and David Van Horn. Pushdown control-flow analysis for free. *ACM SIGPLAN Notices*, 51(1):691–704, January 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Flatt:2016:BSS

[2275] Matthew Flatt. Binding as sets of scopes. *ACM SIGPLAN Notices*, 51(1): 705–717, January 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Hasuo:2016:LTP

[2276] Ichiro Hasuo, Shunsuke Shimizu, and Corina Cîrstea. Lattice-theoretic progress measures and coalgebraic model checking. *ACM SIGPLAN Notices*, 51(1):718–732, January 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Chatterjee:2016:AAP

[2277] Krishnendu Chatterjee, Amir Kafshdar Goharshady, Rasmus Ibsen-Jensen, and Andreas Pavlogiannis. Algorithms for algebraic path properties in concurrent systems of constant treewidth components. *ACM SIGPLAN Notices*, 51(1):733–747, January 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Muroya:2016:MGI

[2278] Koko Muroya, Naohiko Hoshino, and Ichiro Hasuo. Memoryful geometry of interaction II: recursion and adequacy. *ACM SIGPLAN Notices*, 51(1): 748–760, January 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Raychev:2016:LPN

[2279] Veselin Raychev, Pavol Bielik, Martin Vechev, and Andreas Krause. Learning programs from noisy data. *ACM SIGPLAN Notices*, 51(1):761–774, January 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Bornholt:2016:OSM

[2280] James Bornholt, Emina Torlak, Dan Grossman, and Luis Ceze. Optimizing synthesis with metasketches. *ACM SIGPLAN Notices*, 51(1):775–788, January 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Albarghouthi:2016:MSS

[2281] Aws Albarghouthi, Isil Dillig, and Arie Gurfinkel. Maximal specification synthesis. *ACM SIGPLAN Notices*, 51(1):

789–801, January 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Frankle:2016:EDS

[2282] Jonathan Frankle, Peter-Michael Osera, David Walker, and Steve Zdancewic. Example-directed synthesis: a type-theoretic interpretation. *ACM SIGPLAN Notices*, 51(1):802–815, January 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Homer:2016:ALG

[2283] Michael Homer, Timothy Jones, and James Noble. From APIs to languages: generalising method names. *ACM SIGPLAN Notices*, 51(2):1–12, February 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Maidl:2016:FTL

[2284] André Murbach Maidl, Fabio Mascarenhas, and Roberto Ierusalimschy. A formalization of typed `lua`. *ACM SIGPLAN Notices*, 51(2):13–25, February 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Tanter:2016:GCP

[2285] Éric Tanter and Nicolas Tabareau. Gradual certified programming in `coq`. *ACM SIGPLAN Notices*, 51(2):26–40, February 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Ernst:2016:MSD

[2286] Erik Ernst, Anders Møller, Mathias Schwarz, and Fabio Strocco. Message safety in Dart. *ACM SIGPLAN Notices*, 51(2):41–53, February 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Lyde:2016:CFA

[2287] Steven Lyde, William E. Byrd, and Matthew Might. Control-flow analysis of dynamic languages via pointer analysis. *ACM SIGPLAN Notices*, 51(2): 54–62, February 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Feeley:2016:CML

[2288] Marc Feeley. Compiling for multi-language task migration. *ACM SIGPLAN Notices*, 51(2):63–77, February 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Grimmer:2016:HPC

[2289] Matthias Grimmer, Chris Seaton, Roland Schatz, Thomas Würthinger, and Hanspeter Mössenböck. High-performance cross-language interoperability in a multi-language runtime. *ACM SIGPLAN Notices*, 51(2):78–90, February 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Leopoldseder:2016:JJT

[2290] David Leopoldseder, Lukas Stadler, Christian Wimmer, and Hanspeter Mössenböck. Java-to-JavaScript translation via structured control flow reconstruction of compiler IR. *ACM SIGPLAN Notices*, 51(2):91–103, February 2016. CODEN SINODQ. ISSN 0362-

1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Pape:2016:LIS

[2291] Tobias Pape, Tim Felgentreff, Robert Hirschfeld, Anton Gulenko, and Carl Friedrich Bolz. Language-independent storage strategies for tracing JIT-based virtual machines. *ACM SIGPLAN Notices*, 51(2):104–113, February 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Aakerblom:2016:MPP

[2292] Beatrice Åkerblom and Tobias Wrigstad. Measuring polymorphism in Python programs. *ACM SIGPLAN Notices*, 51 (2):114–128, February 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Alcocer:2016:TPV

[2293] Juan Pablo Sandoval Alcocer and Alexandre Bergel. Tracking down performance variation against source code evolution. *ACM SIGPLAN Notices*, 51(2):129–139, February 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Kedlaya:2016:SST

[2294] Madhukar N. Kedlaya, Behnam Robatmili, and Ben Hardekopf. Server-side type profiling for optimizing client-side JavaScript engines. *ACM SIGPLAN Notices*, 51(2):140–153, February 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Fischer:2016:EIE

[2295] Lars Fischer and Stefan Hanenberg. An empirical investigation of the effects of type systems and code completion on API usability using TypeScript and JavaScript in MS Visual Studio. *ACM SIGPLAN Notices*, 51(2):154–167, February 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Teruel:2016:ACR

[2296] Camille Teruel, Stéphane Ducasse, Damien Cassou, and Marcus Denker. Access control to reflection with object ownership. *ACM SIGPLAN Notices*, 51(2):168–176, February 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Narasimhan:2016:NGS

[2297] Priya Narasimhan, Utsav Drolia, Jiaqi Tan, Nathan D. Mickulicz, and Rajeev Gandhi. The next-generation instadium experience (keynote). *ACM SIGPLAN Notices*, 51(3):1–10, March 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Leissa:2016:SED

[2298] Roland Leißa, Klaas Boesche, Sebastian Hack, Richard Membarth, and Philipp Slusallek. Shallow embedding of DSLs via online partial evaluation. *ACM SIGPLAN Notices*, 51(3):11–20, March 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Scherr:2016:AFC

[2299] Maximilian Scherr and Shigeru Chiba. Almost first-class language embedding: taming staged embedded DSLs. *ACM SIGPLAN Notices*, 51(3):21–30, March 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Reynders:2016:GSB

[2300] Bob Reynders, Dominique Devriese, and Frank Piessens. Generating safe boundary APIs between typed EDSLs and their environments. *ACM SIGPLAN Notices*, 51(3):31–34, March 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Medeiros:2016:ESC

[2301] Flávio Medeiros, Iran Rodrigues, Márcio Ribeiro, Leopoldo Teixeira, and Rohit Gheyi. An empirical study on configuration-related issues: investigating undeclared and unused identifiers. *ACM SIGPLAN Notices*, 51 (3):35–44, March 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

El-Sharkawy:2016:AKS

[2302] Sascha El-Sharkawy, Adam Krafczyk, and Klaus Schmid. Analysing the Kconfig semantics and its analysis tools. *ACM SIGPLAN Notices*, 51 (3):45–54, March 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Alshara:2016:MLO

[2303] Zakarea Alshara, Abdelhak-Djamel Seriai, Chouki Tibermacine, Hinde Lilia Bouziane, Christophe Dony, and Anas Shatnawi. Migrating large object-oriented applications into component-based ones: instantiation and inheritance transformation. *ACM SIGPLAN Notices*, 51(3):55–64, March 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Lopez:2016:SSP

[2304] Michael Lopez, C. Jasson Casey, Gabriel Dos Reis, and Colton Chojnacki. Safer SDN programming through Arbiter. *ACM SIGPLAN Notices*, 51(3):65–74, March 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Kolesnichenko:2016:CBG

[2305] Alexey Kolesnichenko, Christopher M. Poskitt, Sebastian Nanz, and Bertrand Meyer. Contract-based general-purpose GPU programming. *ACM SIGPLAN Notices*, 51(3):75–84, March 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Yamaguchi:2016:IMS

[2306] Hiroshi Yamaguchi and Shigeru Chiba. Inverse macro in Scala. *ACM SIGPLAN Notices*, 51(3):85–94, March 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Adam:2016:TTS

[2307] Sorin Adam and Ulrik Pagh Schultz. Towards tool support for spreadsheet-based domain-specific languages. *ACM SIGPLAN Notices*, 51(3):95–98, March

2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Byalik:2016:NNA

[2308] Antuan Byalik, Sanchit Chadha, and Eli Tilevich. Native-2-native: automated cross-platform code synthesis from web-based programming resources. *ACM SIGPLAN Notices*, 51 (3):99–108, March 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Makarov:2016:CMS

[2309] Dmitri Makarov and Matthias Hauswirth. CLOP: a multi-stage compiler to seamlessly embed heterogeneous code. *ACM SIGPLAN Notices*, 51(3):109–112, March 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Ringert:2016:CCG

[2310] Jan Oliver Ringert, Bernhard Rumpe, and Andreas Wortmann. Composing code generators for C&C ADLs with application-specific behavior languages (tool demonstration). *ACM SIGPLAN Notices*, 51(3):113–116, March 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Kabac:2016:OMS

[2311] Milan Kabác and Charles Consel. Orchestrating masses of sensors: a design-driven development approach. *ACM SIGPLAN Notices*, 51(3):117–120, March 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Foust:2016:GRP

[2312] Gabriel Foust, Jaakko Järvi, and Sean Parent. Generating reactive programs for graphical user interfaces from multi-way dataflow constraint systems. *ACM SIGPLAN Notices*, 51(3):121–130, March 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Florence:2016:PPP

[2313] Spencer P. Florence, Bruke Fetscher, Matthew Flatt, William H. Temps, Tina Kiguradze, Dennis P. West, Charlotte Niznik, Paul R. Yarnold, Robert Bruce Findler, and Steven M. Belknap. POP-PL: a patient-oriented prescription programming language. *ACM SIGPLAN Notices*, 51(3):131–140, March 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Selgrad:2016:LGV

[2314] Kai Selgrad, Alexander Lier, Franz Köferl, Marc Stamminger, and Daniel Lohmann. Lightweight, generative variant exploration for high-performance graphics applications. *ACM SIGPLAN Notices*, 51(3):141–150, March 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Seidl:2016:GSP

[2315] Christoph Seidl, Sven Schuster, and Ina Schaefer. Generative software product line development using variability-aware design patterns. *ACM SIGPLAN Notices*, 51(3):151–160, March 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Font:2016:AMR

[2316] Jaime Font, Lorena Arcega, Øystein Haugen, and Carlos Cetina. Addressing metamodel revisions in model-based software product lines. *ACM SIGPLAN Notices*, 51(3):161–170, March 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Inostroza:2016:MIM

[2317] Pablo Inostroza and Tijs van der Storm. Modular interpreters for the masses: implicit context propagation using object algebras. *ACM SIGPLAN Notices*, 51(3):171–180, March 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Noguera:2016:MQQ

[2318] Carlos Noguera and Viviane Jonckers. Model querying with query models. *ACM SIGPLAN Notices*, 51(3): 181–184, March 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Zhou:2016:PUH

[2319] Yuanyuan Zhou. Programming uncertain <T> hings. *ACM SIGPLAN Notices*, 51(4):1–2, April 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Abadal:2016:WAF

[2320] Sergi Abadal, Albert Cabellos-Aparicio, Eduard Alarcon, and Josep Torrellas. WiSync: an architecture for fast synchronization through on-chip wireless communication. *ACM SIGPLAN Notices*, 51(4):3–17, April 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Wang:2016:RTE

[2321] Xiaodong Wang and José F. Martínez. ReBudget: Trading off efficiency vs. fairness in market-based multicore resource allocation via runtime budget reassignment. *ACM SIGPLAN Notices*, 51(4):19–32, April 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Zhu:2016:DEQ

[2322] Haishan Zhu and Mattan Erez. Dirigent: Enforcing QoS for latency-critical tasks on shared multicore systems. *ACM SIGPLAN Notices*, 51(4):33–47, April 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Kuperman:2016:PR

[2323] Yossi Kuperman, Eyal Moscovici, Joel Nider, Razya Ladelsky, Abel Gordon, and Dan Tsafrir. Paravirtual remote I/O. *ACM SIGPLAN Notices*, 51 (4):49–65, April 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Kaufmann:2016:HPP

[2324] Antoine Kaufmann, SImon Peter, Naveen Kr. Sharma, Thomas Anderson, and Arvind Krishnamurthy. High performance packet processing with FlexNIC. *ACM SIGPLAN Notices*, 51 (4):67–81, April 2016. CODEN SIN-

ODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Bornholt:2016:SCF

[2325] James Bornholt, Antoine Kaufmann, Jialin Li, Arvind Krishnamurthy, Emina Torlak, and Xi Wang. Specifying and checking file system crash-consistency models. *ACM SIGPLAN Notices*, 51(4):83–98, April 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Prasad:2016:PMR

[2326] Aravinda Prasad and K. Gopinath. Prudent memory reclamation in procrastination-based synchronization. *ACM SIGPLAN Notices*, 51(4):99–112, April 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Mukkara:2016:WID

[2327] Anurag Mukkara, Nathan Beckmann, and Daniel Sanchez. Whirlpool: Improving dynamic cache management with static data classification. *ACM SIGPLAN Notices*, 51(4):113–127, April 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Jeon:2016:TTD

[2328] Myeongjae Jeon, Yuxiong He, Hwanju Kim, Sameh Elnikety, Scott Rixner, and Alan L. Cox. TPC: Target-driven parallelism combining prediction and correction to reduce tail latency in interactive services. *ACM SIGPLAN Notices*, 51(4):129–141, April 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Brown:2016:HBS

[2329] Fraser Brown, Andres Nötzli, and Dawson Engler. How to build static checking systems using orders of magnitude less code. *ACM SIGPLAN Notices*, 51 (4):143–157, April 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Zhang:2016:TED

[2330] Tong Zhang, Dongyoon Lee, and Changhee Jung. TxRace: Efficient data race detection using commodity hardware transactional memory. *ACM SIGPLAN Notices*, 51(4): 159–173, April 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Amani:2016:CVH

[2331] Sidney Amani, Alex Hixon, Zilin Chen, Christine Rizkallah, Peter Chubb, Liam O'Connor, Joel Beeren, Yutaka Nagashima, Japheth Lim, Thomas Sewell, Joseph Tuong, Gabriele Keller, Toby Murray, Gerwin Klein, and Gernot Heiser. CoGENT: Verifying high-assurance file system implementations. *ACM SIGPLAN Notices*, 51(4):175–188, April 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Asmussen:2016:MHO

[2332] Nils Asmussen, Marcus Völp, Benedikt Nöthen, Hermann Härtig, and Gerhard Fettweis. M3: a hardware/operating-system co-design to tame heterogeneous manycores. *ACM SIGPLAN Notices*, 51(4):189–203, April 2016.

CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Liaqat:2016:SEE

[2333] Daniyal Liaqat, Silviu Jingoi, Eyal de Lara, Ashvin Goel, Wilson To, Kevin Lee, Italo De Moraes Garcia, and Manuel Saldana. Sidewinder: an energy efficient and developer friendly heterogeneous architecture for continuous mobile sensing. *ACM SIGPLAN Notices*, 51(4):205–215, April 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Balkind:2016:OOS

[2334] Jonathan Balkind, Michael McKeown, Yaosheng Fu, Tri Nguyen, Yanqi Zhou, Alexey Lavrov, Mohammad Shahrad, Adi Fuchs, Samuel Payne, Xiaohua Liang, Matthew Matl, and David Wentzlaff. OpenPiton: an open source manycore research framework. *ACM SIGPLAN Notices*, 51(4):217–232, April 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Lustig:2016:CVM

[2335] Daniel Lustig, Geet Sethi, Margaret Martonosi, and Abhishek Bhattacharjee. COATCheck: Verifying memory ordering at the hardware-OS interface. *ACM SIGPLAN Notices*, 51 (4):233–247, April 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Markuze:2016:TIP

[2336] Alex Markuze, Adam Morrison, and Dan Tsafrir. True IOMMU protection from DMA attacks: When copy is faster than zero copy. *ACM SIGPLAN Notices*, 51(4):249–262, April 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Awad:2016:SSZ

[2337] Amro Awad, Pratyusa Manadhata, Stuart Haber, Yan Solihin, and William Horne. Silent shredder: Zero-cost shredding for secure non-volatile main memory controllers. *ACM SIGPLAN Notices*, 51(4):263–276, April 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Kwon:2016:SPT

[2338] Youngjin Kwon, Alan M. Dunn, Michael Z. Lee, Owen S. Hofmann, Yuanzhong Xu, and Emmett Witchel. Sego: Pervasive trusted metadata for efficiently verified untrusted system services. *ACM SIGPLAN Notices*, 51 (4):277–290, April 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Tsafrir:2016:SAW

[2339] Dan Tsafrir. Synopsis of the ASPLOS '16 Wild and Crazy Ideas (WACI) invited-speakers session. *ACM SIGPLAN Notices*, 51(4):291–294, April 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Williams:2016:BIC

[2340] R. Stanley Williams. Brain inspired computing. *ACM SIGPLAN Notices*, 51(4):295, April 2016. CODEN SIN-

ODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Phothilimthana:2016:SS

[2341] Phitchaya Mangpo Phothilimthana, Aditya Thakur, Rastislav Bodik, and Dinakar Dhurjati. Scaling up superoptimization. *ACM SIGPLAN Notices*, 51(4):297–310, April 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Hasabnis:2016:LAI

[2342] Niranjan Hasabnis and R. Sekar. Lifting assembly to intermediate representation: a novel approach leveraging compilers. *ACM SIGPLAN Notices*, 51 (4):311–324, April 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Muralidharan:2016:AAC

[2343] Saurav Muralidharan, Amit Roy, Mary Hall, Michael Garland, and Piyush Rai. Architecture-adaptive code variant tuning. *ACM SIGPLAN Notices*, 51(4):325–338, April 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Lin:2016:SKT

[2344] Xiaofeng Lin, Yu Chen, Xiaodong Li, Junjie Mao, Jiaquan He, Wei Xu, and Yuanchun Shi. Scalable kernel TCP design and implementation for short-lived connections. *ACM SIGPLAN Notices*, 51(4):339–352, April 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

ElHajj:2016:SPM

[2345] Izzat El Hajj, Alexander Merritt, Gerd Zellweger, Dejan Milojicic, Reto Achermann, Paolo Faraboschi, Wen mei Hwu, Timothy Roscoe, and Karsten Schwan. SpaceJMP: Programming with multiple virtual address spaces. *ACM SIGPLAN Notices*, 51(4):353–368, April 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Lin:2016:MTP

[2346] Felix Xiaozhu Lin and Xu Liu. `memif`: Towards programming heterogeneous memory asynchronously. *ACM SIGPLAN Notices*, 51(4):369–383, April 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Kim:2016:NEN

[2347] Wook-Hee Kim, Jinwoong Kim, Woongki Baek, Beomseok Nam, and Youjip Won. NVWAL: Exploiting NVRAM in write-ahead logging. *ACM SIGPLAN Notices*, 51(4):385–398, April 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Kolli:2016:HPT

[2348] Aasheesh Kolli, Steven Pelley, Ali Saidi, Peter M. Chen, and Thomas F. Wenisch. High-performance transactions for persistent memories. *ACM SIGPLAN Notices*, 51(4):399–411, April 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Guo:2016:HDI

[2349] Qing Guo, Karin Strauss, Luis Ceze, and Henrique S. Malvar. High-density image storage using approximate memory cells. *ACM SIGPLAN Notices*, 51 (4):413–426, April 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Izraelevitz:2016:FAP

[2350] Joseph Izraelevitz, Terence Kelly, and Aasheesh Kolli. Failure-atomic persistent memory updates via JUSTDO logging. *ACM SIGPLAN Notices*, 51(4): 427–442, April 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Han:2016:IMD

[2351] Jaeung Han, Seungheun Jeon, Young ri Choi, and Jaehyuk Huh. Interference management for distributed parallel applications in consolidated clusters. *ACM SIGPLAN Notices*, 51(4): 443–456, April 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Maas:2016:THL

[2352] Martin Maas, Krste Asanović, Tim Harris, and John Kubiatowicz. Taurus: a holistic language runtime system for coordinating distributed managed-language applications. *ACM SIGPLAN Notices*, 51(4):457–471, April 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Delimitrou:2016:HRE

[2353] Christina Delimitrou and Christos Kozyrakis. HCloud: Resource-efficient provisioning in shared cloud systems. *ACM SIGPLAN Notices*, 51(4):473–488, April 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Yu:2016:CWM

[2354] Xiao Yu, Pallavi Joshi, Jianwu Xu, Guoliang Jin, Hui Zhang, and Guofei Jiang. CloudSeer: Workflow monitoring of cloud infrastructures via interleaved logs. *ACM SIGPLAN Notices*, 51(4):489–502, April 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Kwon:2016:LCI

[2355] Yonghwi Kwon, Dohyeong Kim, William Nick Sumner, Kyungtae Kim, Brendan Saltaformaggio, Xiangyu Zhang, and Dongyan Xu. LDX: Causality inference by lightweight dual execution. *ACM SIGPLAN Notices*, 51 (4):503–515, April 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Leesatapornwongsa:2016:TTN

[2356] Tanakorn Leesatapornwongsa, Jeffrey F. Lukman, Shan Lu, and Haryadi S. Gunawi. TaxDC: a taxonomy of non-deterministic concurrency bugs in datacenter distributed systems. *ACM SIGPLAN Notices*, 51 (4):517–530, April 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Mao:2016:RFR

[2357] Junjie Mao, Yu Chen, Qixue Xiao, and Yuanchun Shi. RID: Finding reference count bugs with inconsistent path pair

checking. *ACM SIGPLAN Notices*, 51 (4):531–544, April 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Zhang:2016:MPU

[2358] Huazhe Zhang and Henry Hoffmann. Maximizing performance under a power cap: a comparison of hardware, software, and hybrid techniques. *ACM SIGPLAN Notices*, 51(4):545–559, April 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Fan:2016:CSG

[2359] Songchun Fan, Seyed Majid Zahedi, and Benjamin C. Lee. The computational sprinting game. *ACM SIGPLAN Notices*, 51(4):561–575, April 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Colin:2016:EIF

[2360] Alexei Colin, Graham Harvey, Brandon Lucia, and Alanson P. Sample. An energy-interference-free hardware-software debugger for intermittent energy-harvesting systems. *ACM SIGPLAN Notices*, 51(4):577–589, April 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Witchel:2016:PPW

[2361] Emmett Witchel. Programmer productivity in a world of mushy interfaces: Challenges of the post-ISA reality. *ACM SIGPLAN Notices*, 51 (4):591, April 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Angstadt:2016:RPP

[2362] Kevin Angstadt, Westley Weimer, and Kevin Skadron. RAPID programming of pattern-recognition processors. *ACM SIGPLAN Notices*, 51(4): 593–605, April 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Sui:2016:PCA

[2363] Xin Sui, Andrew Lenharth, Donald S. Fussell, and Keshav Pingali. Proactive control of approximate programs. *ACM SIGPLAN Notices*, 51 (4):607–621, April 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Park:2016:ATC

[2364] Jongse Park, Emmanuel Amaro, Divya Mahajan, Bradley Thwaites, and Hadi Esmaeilzadeh. AxGames: Towards crowdsourcing quality target determination in approximate computing. *ACM SIGPLAN Notices*, 51(4): 623–636, April 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Bornholt:2016:DBA

[2365] James Bornholt, Randolph Lopez, Douglas M. Carmean, Luis Ceze, Georg Seelig, and Karin Strauss. A DNA-based archival storage system. *ACM SIGPLAN Notices*, 51(4):637–649, April 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Prabhakar:2016:GCH

[2366] Raghu Prabhakar, David Koeplinger, Kevin J. Brown, HyoukJoong Lee,

Christopher De Sa, Christos Kozyrakis, and Kunle Olukotun. Generating configurable hardware from parallel patterns. *ACM SIGPLAN Notices*, 51(4): 651–665, April 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Chang:2016:DLD

[2367] Li-Wen Chang, Hee-Seok Kim, and Wen mei W. Hwu. DySel: Lightweight dynamic selection for kernel-based data-parallel programming model. *ACM SIGPLAN Notices*, 51(4):667–680, April 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Chen:2016:BQA

[2368] Quan Chen, Hailong Yang, Jason Mars, and Lingjia Tang. Baymax: QoS awareness and increased utilization for non-preemptive accelerators in warehouse scale computers. *ACM SIGPLAN Notices*, 51(4):681–696, April 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Nowatzki:2016:ABS

[2369] Tony Nowatzki and Karthikeyan Sankaralingam. Analyzing behavior specialized acceleration. *ACM SIGPLAN Notices*, 51(4):697–711, April 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Yoon:2016:PPI

[2370] Man-Ki Yoon, Negin Salajegheh, Yin Chen, and Mihai Christodorescu. PIFT: Predictive information-flow tracking. *ACM SIGPLAN Notices*, 51(4):713–725, April 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Venkat:2016:HHI

[2371] Ashish Venkat, Sriskanda Shamasunder, Hovav Shacham, and Dean M. Tullsen. HIPStR: Heterogeneous-ISA program state relocation. *ACM SIGPLAN Notices*, 51(4):727–741, April 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Aweke:2016:ASB

[2372] Zelalem Birhanu Aweke, Salessawi Ferede Yitbarek, Rui Qiao, Reetuparna Das, Matthew Hicks, Yossi Oren, and Todd Austin. ANVIL: Software-based protection against next-generation rowhammer attacks. *ACM SIGPLAN Notices*, 51(4):743–755, April 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Didona:2016:PAM

[2373] Diego Didona, Nuno Diegues, Anne-Marie Kermarrec, Rachid Guerraoui, Ricardo Neves, and Paolo Romano. ProteusTM: Abstraction meets performance in transactional memory. *ACM SIGPLAN Notices*, 51(4):757–771, April 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Shalev:2016:CCS

[2374] Noam Shalev, Eran Harpaz, Hagar Porat, Idit Keidar, and Yaron Weinsberg. CSR: Core surprise removal in commodity operating systems. *ACM SIG-*

PLAN Notices, 51(4):773–787, April 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Gangwani:2016:CBS

[2375] Tanmay Gangwani, Adam Morrison, and Josep Torrellas. CASPAR: Breaking serialization in lock-free multicore synchronization. *ACM SIGPLAN Notices*, 51(4):789–804, April 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Spink:2016:EAI

[2376] Tom Spink, Harry Wagstaff, and Björn Franke. Efficient asynchronous interrupt handling in a full-system instruction set simulator. *ACM SIGPLAN Notices*, 51(5):1–10, May 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Robinson:2016:CCM

[2377] Forrest J. Robinson, Michael R. Jantz, and Prasad A. Kulkarni. Code cache management in managed language VMs to reduce memory consumption for embedded systems. *ACM SIGPLAN Notices*, 51(5):11–20, May 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Nobre:2016:GBI

[2378] Ricardo Nobre, Luiz G. A. Martins, and João M. P. Cardoso. A graph-based iterative compiler pass selection and phase ordering approach. *ACM SIGPLAN Notices*, 51(5):21–30, May 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Banerjee:2016:TVL

[2379] Kunal Banerjee, Chittaranjan Mandal, and Dipankar Sarkar. Translation validation of loop and arithmetic transformations in the presence of recurrences. *ACM SIGPLAN Notices*, 51(5):31–40, May 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Sui:2016:LOA

[2380] Yulei Sui, XIaokang Fan, Hao Zhou, and Jingling Xue. Loop-oriented array- and field-sensitive pointer analysis for automatic SIMD vectorization. *ACM SIGPLAN Notices*, 51(5):41–51, May 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Domagala:2016:GCT

[2381] Lukasz Domagala, Duco van Amstel, and Fabrice Rastello. Generalized cache tiling for dataflow programs. *ACM SIGPLAN Notices*, 51(5):52–61, May 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Chu:2016:SEM

[2382] Duc-Hiep Chu, Joxan Jaffar, and Rasool Maghareh. Symbolic execution for memory consumption analysis. *ACM SIGPLAN Notices*, 51(5):62–71, May 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Metta:2016:TSM

[2383] Ravindra Metta, Martin Becker, Prasad Bokil, Samarjit Chakraborty, and R. Venkatesh. TIC: a scalable model checking based approach to WCET estimation. *ACM SIGPLAN Notices*, 51(5):72–81, May 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Chen:2016:CIM

[2384] Kuan-Hsun Chen, Björn Bönninghoff, Jian-Jia Chen, and Peter Marwedel. Compensate or ignore? Meeting control robustness requirements through adaptive soft-error handling. *ACM SIGPLAN Notices*, 51(5):82–91, May 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Chakraborty:2016:OCP

[2385] Prasenjit Chakraborty, Gautam Doshi, Shashank Shekhar, and Vikrant Kumar. Opportunity for compute partitioning in pursuit of energy-efficient systems. *ACM SIGPLAN Notices*, 51 (5):92–101, May 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Phothilimthana:2016:CGR

[2386] Phitchaya Mangpo Phothilimthana, Michael Schuldt, and Rastislav Bodik. Compiling a gesture recognition application for a low-power spatial architecture. *ACM SIGPLAN Notices*, 51 (5):102–112, May 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Micolet:2016:MLA

[2387] Paul-Jules Micolet, Aaron Smith, and Christophe Dubach. A machine learning approach to mapping streaming workloads to dynamic multicore processors. *ACM SIGPLAN Notices*, 51 (5):113–122, May 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Memarian:2016:DCE

[2388] Kayvan Memarian, Justus Matthiesen, James Lingard, Kyndylan Nienhuis, David Chisnall, Robert N. M. Watson, and Peter Sewell. Into the depths of C: elaborating the de facto standards. *ACM SIGPLAN Notices*, 51(6):1–15, June 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Chamith:2016:LER

[2389] Buddhika Chamith, Bo Joel Svensson, Luke Dalessandro, and Ryan R. Newton. Living on the edge: rapid-toggling probes with cross-modification on x86. *ACM SIGPLAN Notices*, 51(6):16–26, June 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Noonan:2016:PTI

[2390] Matt Noonan, Alexey Loginov, and David Cok. Polymorphic type inference for machine code. *ACM SIGPLAN Notices*, 51(6):27–41, June 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Padhi:2016:DDP

[2391] Saswat Padhi, Rahul Sharma, and Todd Millstein. Data-driven precon-

dition inference with learned features. *ACM SIGPLAN Notices*, 51(6):42–56, June 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Sousa:2016:CHL

[2392] Marcelo Sousa and Isil Dillig. Cartesian Hoare logic for verifying k-safety properties. *ACM SIGPLAN Notices*, 51(6):57–69, June 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Lee:2016:VBM

[2393] Wonyeol Lee, Rahul Sharma, and Alex Aiken. Verifying bit-manipulations of floating-point. *ACM SIGPLAN Notices*, 51(6):70–84, June 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Chen:2016:CDD

[2394] Yuting Chen, Ting Su, Chengnian Sun, Zhendong Su, and Jianjun Zhao. Coverage-directed differential testing of JVM implementations. *ACM SIGPLAN Notices*, 51(6):85–99, June 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Sorensen:2016:EER

[2395] Tyler Sorensen and Alastair F. Donaldson. Exposing errors related to weak memory in GPU applications. *ACM SIGPLAN Notices*, 51(6):100–113, June 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Faddegon:2016:LCT

[2396] Maarten Faddegon and Olaf Chitil. Lightweight computation tree tracing for lazy functional languages. *ACM SIGPLAN Notices*, 51(6):114–128, June 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Hong:2016:EPM

[2397] Changwan Hong, Wenlei Bao, Albert Cohen, Sriram Krishnamoorthy, Louis-Noël Pouchet, Fabrice Rastello, J. Ramanujam, and P. Sadayappan. Effective padding of multidimensional arrays to avoid cache conflict misses. *ACM SIGPLAN Notices*, 51(6):129–144, June 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Zhu:2016:GLE

[2398] Yuhao Zhu and Vijay Janapa Reddi. GreenWeb: language extensions for energy-efficient mobile web computing. *ACM SIGPLAN Notices*, 51(6):145–160, June 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Laurenzano:2016:IRU

[2399] Michael A. Laurenzano, Parker Hill, Mehrzad Samadi, Scott Mahlke, Jason Mars, and Lingjia Tang. Input responsiveness: using canary inputs to dynamically steer approximation. *ACM SIGPLAN Notices*, 51(6):161–176, June 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Achour:2016:CSP

[2400] Sara Achour, Rahul Sarpeshkar, and Martin C. Rinard. Configuration synthesis for programmable analog devices with Arco. *ACM SIGPLAN Notices*, 51 (6):177–193, June 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Madsen:2016:DFD

[2401] Magnus Madsen, Ming-Ho Yee, and Ondrej Lhoták. From Datalog to Flix: a declarative language for fixed points on lattices. *ACM SIGPLAN Notices*, 51(6):194–208, June 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Truong:2016:LLC

[2402] Leonard Truong, Rajkishore Barik, Ehsan Totoni, Hai Liu, Chick Markley, Armando Fox, and Tatiana Shpeisman. Latte: a language, compiler, and runtime for elegant and efficient deep neural networks. *ACM SIGPLAN Notices*, 51(6):209–223, June 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Adams:2016:CPP

[2403] Michael D. Adams, Celeste Hollenbeck, and Matthew Might. On the complexity and performance of parsing with derivatives. *ACM SIGPLAN Notices*, 51(6):224–236, June 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Heule:2016:SSA

[2404] Stefan Heule, Eric Schkufza, Rahul Sharma, and Alex Aiken. Stratified synthesis: automatically learning the x86-64 instruction set. *ACM SIGPLAN Notices*, 51(6):237–250, June 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Eizenberg:2016:ROD

[2405] Ariel Eizenberg, Shiliang Hu, Gilles Pokam, and Joseph Devietti. Remix: online detection and repair of cache contention for the JVM. *ACM SIGPLAN Notices*, 51(6):251–265, June 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

David:2016:SSB

[2406] Yaniv David, Nimrod Partush, and Eran Yahav. Statistical similarity of binaries. *ACM SIGPLAN Notices*, 51 (6):266–280, June 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Zhang:2016:ABS

[2407] Yizhou Zhang, Guido Salvaneschi, Quinn Beightol, Barbara Liskov, and Andrew C. Myers. Accepting blame for safe tunneled exceptions. *ACM SIGPLAN Notices*, 51(6):281–295, June 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Kent:2016:OTM

[2408] Andrew M. Kent, David Kempe, and Sam Tobin-Hochstadt. Occurrence

typing modulo theories. *ACM SIGPLAN Notices*, 51(6):296–309, June 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Vekris:2016:RTT

[2409] Panagiotis Vekris, Benjamin Cosman, and Ranjit Jhala. Refinement types for TypeScript. *ACM SIGPLAN Notices*, 51(6):310–325, June 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Smith:2016:MPS

[2410] Calvin Smith and Aws Albarghouthi. MapReduce program synthesis. *ACM SIGPLAN Notices*, 51(6): 326–340, June 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Chugh:2016:PDM

[2411] Ravi Chugh, Brian Hempel, Mitchell Spradlin, and Jacob Albers. Programmatic and direct manipulation, together at last. *ACM SIGPLAN Notices*, 51(6):341–354, June 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Loncaric:2016:FSF

[2412] Calvin Loncaric, Emina Torlak, and Michael D. Ernst. Fast synthesis of fast collections. *ACM SIGPLAN Notices*, 51(6):355–368, June 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

McClurg:2016:EDN

[2413] Jedidiah McClurg, Hossein Hojjat, Nate Foster, and Pavol Cerný. Event-driven network programming. *ACM SIGPLAN Notices*, 51(6):369–385, June 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Beckett:2016:TN

[2414] Ryan Beckett, Michael Greenberg, and David Walker. Temporal NetKAT. *ACM SIGPLAN Notices*, 51(6):386–401, June 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

El-Hassany:2016:SCA

[2415] Ahmed El-Hassany, Jeremie Miserez, Pavol Bielik, Laurent Vanbever, and Martin Vechev. SDNRacer: concurrency analysis for software-defined networks. *ACM SIGPLAN Notices*, 51 (6):402–415, June 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Shambaugh:2016:RCV

[2416] Rian Shambaugh, Aaron Weiss, and Arjun Guha. Rehearsal: a configuration verification tool for puppet. *ACM SIGPLAN Notices*, 51(6): 416–430, June 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Chen:2016:TCV

[2417] Hao Chen, Xiongnan (Newman) Wu, Zhong Shao, Joshua Lockerman, and Ronghui Gu. Toward compositional verification of interruptible OS kernels and device drivers. *ACM SIGPLAN Notices*, 51(6):431–447, June

2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Mullen:2016:VPO

[2418] Eric Mullen, Daryl Zuniga, Zachary Tatlock, and Dan Grossman. Verified peephole optimizations for CompCert. *ACM SIGPLAN Notices*, 51 (6):448–461, June 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Ren:2016:JTS

[2419] Brianna M. Ren and Jeffrey S. Foster. Just-in-time static type checking for dynamic languages. *ACM SIGPLAN Notices*, 51(6):462–476, June 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Petricek:2016:TDM

[2420] Tomas Petricek, Gustavo Guerra, and Don Syme. Types from data: making structured data first-class citizens in F#. *ACM SIGPLAN Notices*, 51 (6):477–490, June 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Zhu:2016:ALS

[2421] He Zhu, Gustavo Petri, and Suresh Jagannathan. Automatically learning shape specifications. *ACM SIGPLAN Notices*, 51(6):491–507, June 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Yaghmazadeh:2016:STH

[2422] Navid Yaghmazadeh, Christian Klinger, Isil Dillig, and Swarat Chaudhuri. Synthesizing transformations on hierarchically structured data. *ACM SIGPLAN Notices*, 51(6):508–521, June 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Polikarpova:2016:PSP

[2423] Nadia Polikarpova, Ivan Kuraj, and Armando Solar-Lezama. Program synthesis from polymorphic refinement types. *ACM SIGPLAN Notices*, 51 (6):522–538, June 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Maleki:2016:HOT

[2424] Sepideh Maleki, Annie Yang, and Martin Burtscher. Higher-order and tuple-based massively-parallel prefix sums. *ACM SIGPLAN Notices*, 51(6):539–552, June 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Kim:2016:DOF

[2425] Junghyun Kim, Gangwon Jo, Jaehoon Jung, Jungwon Kim, and Jaejin Lee. A distributed OpenCL framework using redundant computation and data replication. *ACM SIGPLAN Notices*, 51 (6):553–569, June 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Degenbaev:2016:ITG

[2426] Ulan Degenbaev, Jochen Eisinger, Manfred Ernst, Ross McIlroy, and Hannes Payer. Idle time garbage collection scheduling. *ACM SIGPLAN Notices*, 51(6):570–583, June 2016. CODEN SINODQ. ISSN 0362-1340

(print), 1523-2867 (print), 1558-1160 (electronic).

Jacek:2016:ALP

[2427] Nicholas Jacek, Meng-Chieh Chiu, Benjamin Marlin, and Eliot Moss. Assessing the limits of program-specific garbage collection performance. *ACM SIGPLAN Notices*, 51(6):584–598, June 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

vGleissenthall:2016:CUQ

[2428] Klaus v. Gleissenthall, Nikolaj Bjørner, and Andrey Rybalchenko. Cardinalities and universal quantifiers for verifying parameterized systems. *ACM SIGPLAN Notices*, 51(6):599–613, June 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Padon:2016:ISV

[2429] Oded Padon, Kenneth L. McMillan, Aurojit Panda, Mooly Sagiv, and Sharon Shoham. Ivy: safety verification by interactive generalization. *ACM SIGPLAN Notices*, 51(6):614–630, June 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Yang:2016:PDI

[2430] Jean Yang, Travis Hance, Thomas H. Austin, Armando Solar-Lezama, Cormac Flanagan, and Stephen Chong. Precise, dynamic information flow for database-backed applications. *ACM SIGPLAN Notices*, 51(6):631–647, June 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Costanzo:2016:EEV

[2431] David Costanzo, Zhong Shao, and Ronghui Gu. End-to-end verification of information-flow security for C and assembly programs. *ACM SIGPLAN Notices*, 51(6):648–664, June 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Sinha:2016:DVM

[2432] Rohit Sinha, Manuel Costa, Akash Lal, Nuno P. Lopes, Sriram Rajamani, Sanjit A. Seshia, and Kapil Vaswani. A design and verification methodology for secure isolated regions. *ACM SIGPLAN Notices*, 51(6):665–681, June 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Spiegelman:2016:TDS

[2433] Alexander Spiegelman, Guy Golan-Gueta, and Idit Keidar. Transactional data structure libraries. *ACM SIGPLAN Notices*, 51(6):682–696, June 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Baghsorkhi:2016:FAV

[2434] Sara S. Baghsorkhi, Nalini Vasudevan, and Youfeng Wu. FlexVec: auto-vectorization for irregular loops. *ACM SIGPLAN Notices*, 51(6):697–710, June 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Kamil:2016:VLS

[2435] Shoaib Kamil, Alvin Cheung, Shachar Itzhaky, and Armando Solar-Lezama.

Verified lifting of stencil computations. *ACM SIGPLAN Notices*, 51(6): 711–726, June 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).