

A Complete Bibliography of Publications in *ACM
Transactions on Programming Languages and Systems*
(*TOPLAS*)

Preston Briggs
Tera Computer Company
2815 Eastlake East
Seattle, WA 98102
USA

Tel: +1 206 325-0800
E-mail: preston@tera.com

and

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/>

09 March 2023
Version 2.147

Title word cross-reference

[SRW02]. + [Han81a]. TM [Bla03]. ^{.5ex/}
[AW82]. || [DDDCG02]. A [DES12]. \mathcal{R}
[JMSY92]. \mathcal{R}_{Lin} [VR95]. ℓ [ADG⁺94].
(*k*) [ADGM91, BL94b, KM81]. 2 [Dam03]. 3 $O(nm)$ [Pet82]. ϕ [CF95, DR05]. π [ABL03].

-calculus [ABL03]. **-Exclusion** [ADG⁺94].
-function [DR05]. **-Nodes** [CF95]. **-Tree**
 [Han81a]. **-valued** [SRW02].

11 [ND16]. 16 [TGT20].

2 [SZLY21]. 2018 [Ahm20]. 2020 [Mül21].
 2021 [Yos22]. 256 [App15].

40 [TGT20].

568 [Han81b].

8 [Ano18].

90 [DP99]. 95 [WJS⁺00].

Abstract

[BGL93, BK11, CMB⁺95, CFG⁺97, DGG97,
 DC22, DLR16, ELS⁺14, EO80, GS98, HL82,
 JPP91, KRR18, Lan80, LO94, LV94, LM18,
 LR13, Loe87, MSJ94, MXZ⁺22, MP88, SS98,
 She91, TY21, Wei89, van88, ABS09, BDL⁺08,
 BdlBH99, Leu04, RM07, SYH07, SJ03].

Abstraction

[BNNN22, CGL94, CL94, Der85, GMH81,
 GKM20, SM81, BMR05, BBTS07, GMZ00,
 LN02, LH08, MOSS96, PR07, Ell82].

abstractions [BCF04]. Access

[ABLP93, BCC04, KS83, Mis86, NBG13,
 SR21, HR02, HO07, KSK07, PHP02, PSS05].

Access-Right [KS83]. **accessed** [RR05].

Accessing [CB80]. **Account** [ABC⁺21].

Accumulation [Bir84, Bir85].

Accumulators [Cam89]. **Accuracy**

[LVRG21, CEG07, HDH02]. **accurate**

[CG04, VBLG04, VALG05]. **ACE** [Le 88].

ACM [Ano18, TGT20, Kro82, Kro83,
 Kro84, Kro85, Kro86, Kro87, Kro88, Kro89,
 Kro90, Kro91, Kro92]. **Across** [NSTD⁺15].

Action [BKS88]. **Actions** [Lam94, LS83].

Active [SR21]. **Activity** [Bar81, MTG80].

Actor [TCP⁺17]. **Acyclic** [BE94, JF81].

Ad [MDCB91, PS08]. **Ada**

[Bak82, Dil90, Hil88, LP80, WJS⁺00].

Adaptation [Dha91]. **Adaptive** [ABH06,
 HOYY18, PXL95, TCVB14, UJ92, RD03].

adaptors [YS97]. **Addendum** [Bir85].

Adding [ACW90, BN94]. **Addition**

[CBMO19]. **Addressing** [Hol87, ZP10].

Adequacy [KKSD94, Wey83]. **adjusting**

[ABB⁺09]. **advice** [WKD04]. **Æminium**

[SNS⁺14]. **Affine** [BAC16, BCEM15,
 CFNH18, DG19, ELS⁺14, VJB12]. **Affix**

[GF85]. **agents** [BCC04]. **aggregate**

[LSLR05]. **Ahead** [BLH12, DP82]. **al**

[Ano18, TGT20]. **Alarms** [LLK⁺17].

Algebra [Koz97, Wil82a, KBC⁺99].

Algebraic [BP82, BWP87, CIJGP18,
 CGG⁺19, Jen97, Lin93, SV20, JB06, SP07].

Algorithm
 [AB81, Bak82, BB79, BAC16, BP82, Dan23,
 DSW82, Dha91, DP93, GHS83, HL22, Hua90,
 Hud91, JJCO19, LV94, LY98, Lei90, LT79,
 LH91, MM82, MC82a, Pet82, SH89, TB98,
 Wis79, BKRW98, BH99, DR05, DVD07,
 JNZ06, Van96a, Van96b, Han81b, BKRW05].

Algorithmic

[BP82, CFNH18, GM12, Loe87].

Algorithms [Apt86, BA84, CIJGP18,
 CGG⁺19, CS95, CN83, GLO88, KRS84,
 KKM90, Kro82, Kro83, Kro84, Kro85,
 Kro86, Kro87, Kro88, Kro89, Kro90, Kro91,
 Kro92, MM89, RD87, RH87, RP88, TM93,
 WW95, Apt00, DAS98, GC01, ZGZ05].

Alias [Hor97, HBCC99, RRSY08]. **Aliasing**

[Boe85, Ram94, RLS⁺01]. **All-Purpose**

[Spo86]. **Allocating** [ZP07]. **Allocation**

[BB79, Bre89, BCT94, CH90, CS95, FLBB89,
 GSO94, LCBS19, Rob79, SH89, CGS⁺03,
 HCS10, LGAT00, PS99, PF96, RDG08,
 SRM10, TP04]. **Alma** [ABPS98]. **Alma-O**

[ABPS98]. **almost** [Duc08, Ram99].

Alternative [Gho93, GH80, Zav85]. **Always**

[Gri79]. **ambients** [BCC04, LS03, MH06].

Ambiguity [Tho94]. **amortized** [HAH12].

Amulet [VHM⁺01]. **Analyses**

[AC94, CC95, CFM94, TN19, KSV96, SJ03].

Analysis

[AKNP17, ABE⁺05, AD98, Bac84, BNN18, BC85b, Blo94, BE13, Bur90a, CFNH18, CFG19, CDK⁺18, CMN91, DKKL18, DL93, Deb95, DP97, DC22, DAW88, FPS19, FJK⁺17, GNS⁺15, GKM20, GDF23, GJ93, HP96, HL22, HOYY18, Hil88, Hor97, ISY88, Jen97, JJCO19, KD94, LLK⁺17, LTMS20, LR13, LHR19, LWR21, McG82, MRGP20, MWB94, MOS07b, OHL⁺14, OLH⁺16, Pal95, PO95, PCC85, PP91, PW94, PW98, Pur91, RTD83, RTP17, RRB19, RP88, SR95, SSS83, SGL98, SS13, ABB⁺09, BDFZ09, BAL07, Bla03, Blu99, BCG⁺07, CSW06, Cha02, CGS⁺03, CKT86, DDV99, DGS97, FF99, GHB⁺96, GJ05, GZ04, GCRN11, HAM⁺05, HPMS00, HBCC99, HVDH07, HAH12, IK05, JLRS10, KBC⁺99, KK07, KSK07, LP00, LH08, MPM03, NS13, PHP02, Pal98, PKH07, Ram00, Rep00, RSL10, RD97].

analysis [RRSY08, RR03, RR05, RLS⁺01, SRW98, SRW02, STS03, SdSCP13, SS96, ST00a, WP10, WJ98, ZSD09, dHB⁺96].

analyze [DMM01, VBLG04]. **analyzer** [SMP10]. **Analyzing** [AW85, BEF⁺16, CFP⁺04, GMM99].

And/Or [Har80]. **Annotations** [Bur84].

AOP [DES12]. **APL** [Bud84, GD82, Hob84].

Applicability [DAW88, How80, LS98].

applicable [Gom92]. **Application** [CD79, DF80, DF81, LBN17, LR13].

Applications [BLRS12, Bou88, MRGP20, SR21, BALP06, CMLC06, NR06].

Applicative [AC94, KS86]. **apprentice** [MP02]. **Approach** [AKNP17, ABR81, AR80, BAC16, BP82, Bur90a, CH90, CD79, DS90, Ell82, ES97, FT94, GGL15, Har80, Hes88, KKW14, Lam79, Lam80, Lee86, LTMS20, MW80, MDCB91, ND16, OA88, Sam80, Spo86, SM81, SNS⁺14, Bou05, CRN⁺08, DHM⁺12, FGM⁺07a, JLRS10, KV00, LP80, MBT09, PSS05, PCJD08, RC03, SP07, WS97].

approximations [BGP99]. **Apt** [Moi83].

architected [ZP07]. **Architecture** [Wal92].

Architectures

[Han94, KPF95, NSTD⁺15, PAS⁺15].

Arising [Bac84]. **Arithmetic** [Fis80, GNS⁺15, Hen83, LdR81, MOS07b].

ARM [FKW98, ADG⁺21]. **Armada** [LCK⁺22]. **Armed** [ADG⁺21]. **Array** [CGST95, CG95, LS79, Per79, PW98, JB06, LSLR05, NI05, PHP02, RMH06, RR05, ZCG⁺07]. **array-valued** [RMH06]. **Arrays** [BBC16]. **Article** [Ano18, TGT20]. **ASF** [VHKO02]. **aspect** [DWWW08, WKD04]. **aspect-oriented** [DWWW08, WKD04].

AspectML [DWWW08]. **Aspects** [Bor81, Set83]. **assembly** [AAR⁺10, MWCG99]. **Assertions** [BKB80].

Assessing [BDH⁺16, Wey83]. **Assets** [COE⁺20]. **Assignment** [BM94, CFR⁺91, GL80, GPF08, LDK⁺96].

Assisted [HCHP92]. **Assisting** [Fea82].

Associated [PPS79]. **associativity** [Cha02].

Associons [Rem81]. **assume** [HQRT02]. **assume-guarantee** [HQRT02].

Assumptions [ES97]. **AST** [GVC15].

Asynchronous [Bag89, GLO88, Mis86, GM12, HR02]. **ATL** [WSH15]. **Atomic** [WL85, Wei90, AE01].

Atomicity [JLP⁺14, Wei89, FFLQ08].

Attacks [SBE⁺19]. **Attribute** [CP95, Hud91, JP81, Jon90, Kat84, KR79, MK94, RD87, WW95, Boy96, CP96, Wu04].

Attributes [HT86]. **Author** [Ano86a, Ano88a, Ano89a, Ano90a, Ano91a, Ano92a, Ano94, Ano95, Ano98, Bur91].

authorization [FGM07b]. **Authors** [Ano82, Ano83, Ano84, Ano85, Ano86b, Ano87, Ano88b, Ano89b, Ano90b, Ano91b, Ano92b].

auto [ZP10]. **auto-addressing** [ZP10].

Automata [BMW91, CBMO19, ES97, Pro95, KV00].

Automata-Theoretic [ES97, KV00].

Automated [GRSK⁺11, KZC15, KF00, LCK⁺22, Sok87, JNGG10]. **Automatic** [AKNP17, AK87, Ano02a, BBC16, Cat80,

CES86, DS90, KK98, Le 88, LK02, LS04, MS83, PZJ05, RH87, SSS81, SLC03, She91, VS22, Wat91, Wha94, ABHI11, ATD08, BdlBH99, CRN⁺08, ZCG⁺07].
Automatically [Slo95]. **Automating** [GKL94, MTSS09]. **Avoidance** [FGL94]. **aware** [MQ05]. **Axiomatic** [AR80, App94a, Boe85, Sou84, YB87, YB88, LP80]. **Axioms** [Mis86].
B [Han81a]. **backpropagator** [PS08]. **Backtracking** [Lin79, VR95, FM87a]. **Backward** [DL18, Mye18]. **Balanced** [AS80, PB80, vHK00]. **Barrier** [CHMY19]. **Base** [NcS20, LS98]. **Based** [BPP16, BGL93, Bur90a, CGJ⁺97a, CI84, CP95, CH90, CPS93, DVLM15, DLR16, EGP14, GG85, HT86, JTM98, Kai89, KH92, KR79, LFF14, PW98, RTD83, SR95, SGL98, Ste18, SNS⁺14, TY18, Wat94, WGS92, vPS81, BFG08, BMR01, BHM⁺07, BCG⁺07, CTT07, DDV99, Eug07, FF99, HBJ98, KBC⁺99, KK07, KC01, LP00, LH08, LGAT00, MTSS09, ML21, MTK21, MH06, Pal98, PPT08, PCJD08, SP97, SP07, SMP10, SYN06, BDP14, WGS93, WM12]. **Basic** [CGG⁺19, GLR83]. **Bayesian** [HOYY18]. **BDD** [LH08]. **BDD-based** [LH08]. **Be** [Bee94, Coh91, Wir91, CG04, LP99]. **Behavior** [KLS92, GMM99, VBLG04]. **Behavioral** [LN15, LW94]. **Behavioural** [SV20]. **Being** [Cop94]. **benefits** [GMP⁺00]. **Better** [Gri79, Lam88]. **between** [BS88]. **Beyond** [GSW95]. **BI** [BBTS07]. **BI-hyperdoctrines** [BBTS07]. **Bidirectional** [DP93, MMR95, FGM⁺07a, GPWZ08]. **binaries** [STSP05]. **Binary** [Sip82, DDD05, MMM⁺07, RC03, YF09]. **binding** [ACE96]. **Birrell** [MDJ05]. **Bisimulation** [FDY12, MH06, San09]. **bisimulation-based** [MH06]. **Bisimulations** [SV19, SKS11]. **Bit** [CDK⁺18, KD94, KK07]. **Bit-Precise** [CDK⁺18]. **bitvector** [KSV96]. **Bliss** [GNS⁺15]. **Block** [LS81, Mur91]. **Block-Structured** [LS81]. **Blockchain** [COE⁺20]. **Blocked** [FTJ95]. **Blocks** [Jag94]. **Boolean** [XA07]. **Bootstrapping** [App94a]. **Borrowing** [Pea21]. **Both** [KZC15]. **bottlenecks** [RD03]. **Bottom** [BGL93, GCRN11]. **Bottom-Up** [BGL93, GCRN11]. **bound** [KK07, NI05]. **Bounded** [ADG⁺94, ITF⁺22, MXZ⁺22]. **Bounds** [CP17, FNBG20, ISIRS22, PW94, BP12, CEI⁺07, RR05, SS05a]. **Box** [WLBFB16]. **boxed** [BCC04]. **Branch** [CGJ⁺97a, CEG07, YUW02, YS99]. **Branches** [WZ91, RC03]. **Branching** [CBMO19]. **Broad** [DAW88]. **Buddy** [Kau84]. **Buffer** [Žic94]. **bugs** [HCS10]. **Building** [Jag94]. **BURS** [Pro95]. **Bus** [Pur94]. **Bytecode** [SA99, BDL⁺08, CSCM00, FM99, GPF08, KR01, Qia00, SMP10, WR08]. **Byzantine** [LSP82].
C [PHEK99, BR97, HSS⁺14, MRGP20, ND16, PKH07, PFH11, Ven95]. **C#** [BCF04]. **C/C** [ND16]. **C11** [JP17]. **Cache** [GMM99, KLS92, MMM⁺07, SS96, VBLG04]. **Caching** [ABM93, FK85, KS86, LST98]. **Calculational** [Bou06]. **calculi** [ABS09]. **Calculus** [ABLP93, BKL⁺97, BN94, Gom92, Kob98, LBMTT22, Miq19, MRG88, Nel89, Oho95, WM95, ABL03, AH10, BG22, Bou05, Bou06, BCC04, DES12, HR02, IPW01, Jay04, TA08a, KPT99]. **Call** [DP97, GL80, dBH21, GC01, HL05, KK07, SW97a]. **Call-by-Value** [dBH21, HL05, SW97a]. **Calls** [BNN18, Coh83, Coh85, FF08]. **Can** [Boe85, Coh91, Wir91, CG04]. **Capabilities** [SDB20, WCM00]. **capability** [TA08a]. **Carlo** [FL15]. **carrying** [AM01]. **Case** [CFG19, FTJ95, WW95, BdlBH99, KF03]. **Cats** [AMT14, ADG⁺21]. **Causally** [LB22]. **Cause** [Cas95]. **CCP** [EGM01]. **CCured** [NCH⁺05]. **Cedar** [SZBH86]. **Cells** [ISY88].

Centered [CHY12]. **Centers** [KRS84]. **Centralized** [HM84]. **centric** [DHM⁺12]. **Certificate** [BGKR09, BK11]. **certified** [STSP05]. **CHAD** [VS22]. **Chaining** [LS80]. **Chains** [HS94]. **challenge** [MP02]. **change** [BA08, CP96, Lee09]. **Changes** [Ber94, MTSS09]. **changing** [MP07]. **Chariots** [PB97]. **CHC** [MTK21]. **CHC-based** [MTK21]. **Check** [AP94]. **checked** [KN06]. **checker** [NP08]. **Checking** [Car95, CGL94, ES97, FF08, GL94, ND16, AY01, ACM11, BGP99, FFLQ08, HQRTO2, JJD98, KF10, KV00, NI05, SG04, VJB12, YMW97]. **Checks** [CG95, CEI⁺07]. **Chocola** [SDD21]. **Choice** [BN94, JCMM19]. **CIRCAL** [Mil85]. **Circular** [Jon90, Pet82]. **Circularity** [WW95, Wu04]. **Clarification** [PA86a]. **Class** [CBMO19, HKMN94, Han92, SJ03, SDTF13, HS11, MH04, ST00a]. **Classes** [SDTF13, WT11, HHPW96, HMS06]. **Classical** [JSB⁺12, Miq19]. **Classification** [KZC15]. **Classifying** [GSW95]. **Claus** [WP10]. **Cliché** [Wat94]. **Cliché-Based** [Wat94]. **Clique** [GSO94]. **Closure** [Pal95, SW97b, SA00]. **CLP** [DHM00, GLMM05, JMSY92, KMM⁺98, VR95]. **Clustering** [LLK⁺17]. **Clusters** [BGH⁺13, HBG⁺09]. **coalescing** [GA96, Hai05, PM04]. **Coalgebraic** [KBP22]. **Coalgebras** [KBP22]. **Code** [AGT89, BHM⁺19, Cat80, Cop94, DF84, FGL94, GF85, Hen82, HG83, JSB⁺12, KRS94, LR13, LCK⁺22, ND16, Rob79, TvS82, Wan82, AM01, DEMD00, Hai98, HBG⁺09, HK07, JNZ06, LDK⁺96, MSRR00, ME97, Oho07, PHEK99, WS97, vHK00, CM93, Pem83, WST85]. **Coder** [SBS22]. **Cohen** [Coh85]. **coherence** [SS96]. **coinduction** [San09]. **Collect** [JCMM19]. **Collecting** [HY91]. **Collection** [BA84, CN83, DSW82, Lan80, TM93, URJ18, WLBF16, BALP06, HDH02, PBK⁺07, Piq96]. **Collector** [YW22, BBYG⁺05, LP06, TSBR08]. **Coloring** [BCT94, CH90, GSO94]. **combination** [BCG⁺07]. **Combinator** [FRW90, KLS92]. **Combinatorial** [LCBS19]. **Combinators** [FGM⁺07a, KS88, KS89]. **Combinatory** [RS97, VS22]. **Combining** [Ber94, BP82, CC95, CMB⁺95]. **Come** [LH91]. **Comments** [AB94, KS79, LaL84, NN86, Sor89]. **Communicating** [AFdR80, GC86, HM84, MW84, MC82b, Moi83, Oss83, PP91, Pur91, Sou84, Ber80, KS79]. **Communication** [Ang89, CHY12, FJK⁺17, FY85, Gel85, Hua90, LH91, MB83, vPS81, KBC⁺99, Mil85, SWU10, WM12]. **Communication-Centered** [CHY12]. **Communications** [RS84b]. **Commutativity** [RD97, Apt00, Cha02]. **Compact** [BC79, Sip82, Wad90]. **Compactification** [RH87]. **Compacting** [CN83]. **Compaction** [CP17, Wis79, BP12, DDD05, DEMD00]. **Comparative** [GDF23, WCW90, WCW91]. **Comparing** [Hai05]. **Comparison** [CN83]. **Compartmentalized** [WLBF16]. **CompCert** [BDP14]. **Compensation** [FGL94]. **Compilation** [ABC⁺21, DLR16, FKW98, FL91, JLP⁺14, JF81, Oho95, PAS⁺15, PG21, Sit79, KMM⁺98, LST02, LDM07, SYN06]. **Compile** [ABR81, GW99, Hol87, Tra08]. **Compile-Time** [ABR81, Hol87, GW99, Tra08]. **Compiler** [ABC⁺21, App94a, Bud84, CM86b, DK17, DEMD00, FT94, FGL94, JSB⁺12, Rei83, Slo95, Son87, Wha94, YBL16, Ano02a, CMLC06, DHS09, GMM99, KN06, PE08, PHEK99, SYK⁺05, VHKO02]. **Compiler-Driven** [YBL16]. **Compilers** [BDFH97, DDH84, HP96, Han94, BGKR09, RD97, SYN06]. **Compiling** [Cha93, CH87, Fis80, Set83, VHKO02]. **Complementation** [CFG⁺97]. **Complete**

[BDFH97, WM95]. **Completeness** [LBN17, TB95, WGS92, dBH21, Wu04, WGS93]. **completion** [KR01]. **Complexity** [BG22, BEF⁺16, Deb95, ISIRS22, Le 88, dBH21, RRSY08, SSD09]. **component** [LS98, YS97]. **component-base** [LS98]. **Componential** [FF99]. **Components** [CIJGP18]. **Composable** [SDD21]. **Composing** [AL93, HKMN94]. **Composite** [Fea87]. **composition** [AH10, Pau01]. **Compositional** [DSFG21, Fos96, Jon94, JTM98, LFF14, SZLY21, ZSO21]. **Compositionaly** [Dan23]. **compressed** [DAS98]. **Compression** [BMW91, CSCM00, DKV07]. **Computability** [HMS06]. **Computable** [PK82]. **Computation** [AC94, BG22, BOV85, DP82, HS94, LST98, PB97, ABB⁺09, AE01, DR05, LK02, SWU10, SGL97, Hal85]. **computational** [ATD08, SSD09]. **Computations** [DW89, MC82b, VSS94, YS91, LSLR05, Mon08, YF98]. **Computer** [HCHP92, Wol92]. **Computer-Assisted** [HCHP92]. **Computers** [Fis80, LK02]. **Computing** [ANP89, CFR⁺91, CF95, KM81, HVB⁺99, MMG00]. **Concept** [Tur86, ST00a]. **Concepts** [Eug07]. **Concerning** [Sha82]. **Concrete** [Bar81]. **Concurrency** [ADG⁺21, BG89a, Lam90, LMM21, SDD21, Wei89, BCF04, Mil85, TA08a, CPS93]. **Concurrent** [BC91, Car95, CIJGP18, Cla80, CES86, CPS93, CFM94, DSFG21, DGMP97, FT94, Hal85, HSP83, HW90, Her93, JTM98, Kar84, Lam83, LFF14, LCK⁺22, MSM⁺16, OL82, Pet83a, Pet83b, RY88, SZLY21, Sku95, SNS⁺14, AE98, AE01, AAE04, BBYG⁺05, BGP99, CSW06, JPS⁺08, RS97, SRM10, YS10]. **Concurrent-by-Default** [SNS⁺14]. **Concurrent-Program** [FT94]. **Condensation** [JTM98]. **Condition** [HW90]. **Conditional** [Boy96, GGSV22, WZ91, Dam03]. **Conditioning** [OGJ⁺18]. **conditions** [KWL09]. **Conference** [Wol92]. **confined** [GPV07]. **Conflict** [Cas95]. **Conjecture** [KPS92, Sag86]. **Conjoining** [AL95]. **conservative** [Hai05]. **considered** [Gor04]. **Consistency** [FSH23]. **Consistent** [LB22, XBOS20]. **Constant** [CIJGP18, CGG⁺19, Coh91, WZ91, Wir91]. **Constrained** [BG89a, DAW88, PS96, Žic94, LPP01]. **Constraint** [Bor81, DGMP97, DDV99, HLH19, NSTD⁺15, Pal95, PW98, Ste18, Apt00, BMR01, DPPR00, FH04, GHB⁺96, HPMS00, SS08, SS09, SP07, SSD09, dHB⁺96]. **Constraint-Based** [PW98, Ste18, DDV99, SP07]. **Constraint-Oriented** [Bor81]. **Constraint-Solving** [NSTD⁺15]. **Constraints** [AKP94, DFR15, HG83, Mye90, BA08, RM10, TFK⁺11, Van96b, VHM⁺01, Van96a]. **Construct** [Ans87, BS83, Kat93]. **Construction** [ADGM91, HIT97, LaL81, MB83, RH87, SL92, CMS03, GC01]. **Constructions** [LBMTT22]. **Constructive** [Loe87]. **Constructs** [AR84, DJP⁺16, Par90]. **Containerless** [Ste22]. **Context** [GHR80, KBP22, LTMS20, LWR21, Ode93, Pad19, PK80, Ram00, RTD83, Rep00]. **Context-Dependent** [Ode93, RTD83]. **Context-Free** [GHR80, Pad19, KBP22]. **Context-sensitive** [Ram00, Rep00]. **Context-Unbounded** [LWR21]. **Contexts** [Ode93]. **Continuation** [BDM15, Wan82]. **Continuation-Passing** [BDM15]. **Continuations** [BDM15, HF87]. **Continuous** [KF03]. **contract** [DF11]. **Contracts** [SIG17, SDTF13, CGP09]. **Contravariance** [Cas95]. **Control** [ABLP93, Bur84, CL94, CFR⁺91, DP97, FM87b, HBS22, Kat93, Lam88, Lin79, NBG13, PB97, PBR⁺15, RSPS23, Set83,

SS13, Tur84, Wat83, Wei89, BCM99, BCC04, HO07, PSS05, RAB⁺07, Zho96]. **Controlled** [Min84, Tho94, JC97]. **Controlling** [BALP06, LaL81, LMD98]. **Convention** [AF84]. **Convergence** [Bar85]. **Conversion** [CS87, SW97b, SA00, YK97]. **Cooperating** [GLR83, NO79]. **Cooperation** [BKS88]. **Coordinating** [JS94]. **Coordination** [GLR83]. **copying** [TSBR08]. **core** [IPW01]. **Coroutine** [Sam80]. **Coroutines** [LS81, DI09]. **Correct** [DGMP97, Hen86, JP17, SS88, AAD⁺07]. **Correction** [FA93]. **Correctness** [ABC⁺21, Apt86, CM86b, FRW90, Gom92, HW90, Lam79, Lam80, ML21, Oss83, San96]. **correlated** [YS99]. **Correspondence** [BS88, Bur90b, Bur91, Coh91, CM93, DS88, Ell82, FA93, Fra81, Hen83, LaL83, LaL84, Moh81, Moi83, MS88, NN86, Par90, Pem83, Sor89, SM82, Tan83, Tic88, Vol91, WST85, Wir91, YB88]. **Corrigenda** [WCW91]. **Corrigendum** [Ano18, BKRW05, DF81, Fra80a, KS89, Lam80, Pur91, QG95, TGT20, Van96a, Wal81, WGS93]. **Cost** [AB81, Bac84, DL93, Hai98, Han81a, ZGZ05, VALG05]. **Cost-optimal** [Hai98]. **costs** [GMP⁺00]. **Counting** [Bal94, LP06]. **Counts** [Bob80, Wis79]. **Coupled** [ACW90]. **Covariance** [Cas95]. **covariant** [PZJ05]. **Creating** [Mye90]. **criteria** [Hai05]. **Critical** [PS93]. **Critique** [GM81]. **Cross** [Ano18, FTJ95, GSS⁺18]. **Cross-Interferences** [FTJ95]. **Cross-Language** [Ano18, GSS⁺18]. **Cryptographic** [App15]. **CS** [CD79]. **CSim** [SZLY21]. **CSP** [AF84, Bag89, BS83, Fid93, Hua90, LS84, Žic94]. **CSP-Like** [Hua90]. **CSS** [HLH19]. **currency** [DS98]. **Curry** [LR19]. **Curry-Style** [LR19]. **Custom** [DJP⁺16]. **CV3** [CZ84]. **Cycle** [BG89b, PBK⁺07]. **Cycles** [FRW90]. **Cyclic** [RY88].

D. [Bur91]. **Data** [AMT14, ANP89, AM85, Bac84, BNNN22, BC85b, BL87, Bur90a, Cha93, CS87, Deb89, DP93, DD85, Ell82, EO80, FL81, GMH81, GEGP17, HL82, Her93, Hes88, Hol87, Jen97, JJCO19, KH92, Kam83, KZC15, KK98, KD94, LaL89, LO94, LN02, LVRG21, Loe87, Mal82, MMR95, MCT96, PP91, QG95, RCRH95, RP88, SSS81, Sku95, SGL98, SM81, TWW82, WL85, Wei89, Wei90, Wet82, Wey83, CFP⁺04, DHM⁺12, DGS97, HBJ98, KBC⁺99, KF00, LK02, Rep00, SP07, VALG05, YUW02, ZGZ05, Pur91]. **data-centric** [DHM⁺12]. **Data-Driven** [BL87, CS87, JJCO19]. **Data-Flow** [BC85b, Bur90a, Wet82, RP88, KBC⁺99]. **data-independence** [Rep00]. **data-member** [KF00]. **Data-Parallel** [Cha93, HBJ98]. **Database** [Bar85, CB80]. **Databases** [SR21]. **Dataflow** [Deb95, DFR15, MWB94, SS13, SS96, Van96a, Van96b, VHM⁺01]. **datalog** [LS09, ZSS20]. **datatypes** [MBC04]. **Deadlock** [CHMY19, Hua90, Kob98]. **Deadlock-Free** [Kob98]. **Deadlocks** [FJK⁺17]. **Dealing** [GLMM05, GG85]. **Debugging** [CMN91, CM93, Cop94, Hen82, WST85, ZSS20]. **Decidable** [LB22]. **Deciding** [GGL15]. **Decision** [MTG80, NO79]. **decisions** [MTSS09]. **Declarative** [ABPS98, TCVB14, Bou05, MME⁺10]. **Decompilation** [BB94]. **Decomposing** [BDL⁺08]. **decomposition** [LK02]. **decrease** [LDK⁺96]. **Deducing** [TB95]. **deduction** [LMD98]. **Deductive** [MW80]. **Deep** [YW22]. **Default** [SNS⁺14, LMM21]. **Deferring** [MTSS09]. **Defined** [Wal92, Wal80, Wal81]. **Defining** [Ode93]. **definite** [RKRR04]. **Definition** [Bou92, BWP87, CI84, CD79, Fid93, HS94, WCW90, WCW91, Wol94]. **Definition-Use** [HS94]. **Definitions** [BS86, Wil82b, Dam03, VHKO02, Sij89]. **Delay** [BG89b]. **Delayed** [KPF95, RC03].

Delayed-Load [KPF95]. **Delaying** [Kau84]. **Deleting** [GP81]. **Delimited** [BDM15]. **Demand** [FPS19, GSW95, PA85, PA86a, PA86b, PF96, SR95, DGS97]. **Demand-Driven** [GSW95, PA85, PA86a, PA86b, FPS19, PF96, DGS97]. **Denali** [JNZ06]. **Denotational** [AB94, FA93, Gud92, MSJ94, NF89, Nie85, Sch85, dBB85]. **Dependence** [BGH⁺13, CFR⁺91, FOW87, HBG⁺09, HRB90, ML21, PB97, PW98, Wol94, RAB⁺07]. **Dependence-based** [ML21]. **Dependencies** [PW94]. **Dependencies** [Deb89, HBS22, CSS99]. **Dependency** [Blu99]. **Dependent** [LS80, Miq19, NBG13, Ode93, RTD83, Rob79]. **dequeues** [Chi05]. **DeRemer** [Sag86]. **Derivation** [BKB80, Cat80, DSW82, Gie83, HIT97, Kna90, TM93, Ano02a]. **Deriving** [Wan82, Bou06]. **Describing** [AW85]. **Description** [McG82]. **Descriptions** [Boe85, BKL⁺97, Cat80, Ano02a]. **Descriptors** [Hol87]. **Design** [BPP16, BCD⁺15, BO94, DF80, DF81, DC22, FT94, HM84, KKM90, LDM07, ML80, RCS93, RL98, SYK⁺05, Bou05, MTSS09, CMLC06]. **design-pattern-based** [MTSS09]. **Designing** [LaL89, ALZ03]. **Designs** [AW85]. **destructive** [SRW98]. **Detect** [ISY88]. **Detecting** [GSW95, HCS10, Sch85]. **Detection** [CM86a, Hua90, MC82a, MC82b, TM93, AFF06, HDH02, PFH11, PCJD08, XA07]. **Determinacy** [TK94]. **determination** [DS98]. **Determining** [MF88]. **determinism** [TA08a]. **Deterministic** [KR79, Mye18, DL18, Tar07]. **Development** [BKB80, Col84, Fea87, Jon83, ML80, PPS79, Wil82a]. **Diagnosis** [BF87]. **Dialect** [Mul92]. **Dialects** [CP95]. **dialogue** [BCM99]. **DIB** [FM87a]. **difference** [BA08]. **Differencing** [PK82, RSL10]. **Differential** [BKOZB13, ZP07]. **Differentiation** [Sha82, VS22]. **Diffusing** [MC82b]. **Dijkstra** [BN94, Nel89]. **Dimensional** [Hil88, GPWZ08]. **direct** [YK97]. **Directed** [BDJ13, DMM88, Gud92, Han94, Set83, SYYH07, OKN06]. **Direction** [Dar90]. **Directly** [Hob84]. **Director** [KS88, KS89]. **Directory** [Han81b]. **Discipline** [VMY22, FGM07b]. **Disciplines** [SS84]. **Discovering** [FJK⁺17]. **discovery** [PZJ05]. **Discrete** [Bar81]. **Discrete-Event** [Bar81]. **Disintegration** [NcS20]. **Disjunctive** [Jen97, JCO19]. **dispatch** [DAS98, MFRW09]. **dispatching** [GZ07]. **Distance** [Wol94, ZSD09]. **distribute** [CRN⁺08]. **Distributed** [ABLP93, AF84, Apt86, AW85, BKS88, BCEM15, Bur84, CJK95, CM86a, CBDGF95, CS95, DAW88, Dug99, FLBB89, Fra80b, GHS83, HSG17, Hua90, HM84, Jon94, Kat93, KK98, KRS84, KKM90, Lam84, LS83, MC82a, RCRH95, SS84, Sch82, TM93, TCP⁺17, Zav85, ABL03, FM87a, HVB⁺99, KGMO04, LK02, MDJ05, Piq96, Fra80a, Moh81, VHB⁺97]. **Distributed-Memory** [KK98, RCRH95]. **div** [Bou92]. **Dive** [YW22]. **Divergence** [SdSCP13]. **DJ** [DR05, SGL96, SGL98, UM02]. **DJ-graphs** [UM02]. **DLLs** [Dug02]. **do** [SS05a]. **Documentation** [MH86]. **does** [DMP96]. **dolce** [MP10a]. **Dollars** [HL22]. **Domain** [LM18, Tra08, RM07, SS05a]. **Domains** [CMB⁺95, ELS⁺14, GS98, FH04, GLMM05]. **dominance** [Ano02b, DVD07]. **dominator** [SGL97]. **Dominators** [LT79, Ano02b, BKRW98, BKRW05]. **Don't** [AKNP17]. **Down** [HL22, SZLY21]. **drf** [MSM⁺16]. **Drinking** [CM84, MS88]. **Drive** [PK80]. **Driven** [BL87, CS87, GF85, GSW95, JCO19, PA85, PA86a, PA86b, TGT18, YBL16, DGS97, FPS19, PF96, TGT20, YMW97]. **Dually** [MT08]. **Dummy** [Lam88]. **During** [BKB80]. **DyC** [GMP⁺00]. **Dyck** [LZR22]. **Dynamic** [ACPP91, AGT89, ASF17, BNNN22, BB79, BDM15, Bre89, CGG⁺19, CHMY19, CTT07,

DS98, Dug99, HSS⁺14, HN05, Kai89, KR79, RCRH95, Ven95, WR08, dBB85, ACE96, BP12, CEI⁺07, DDDCG02, GZ07, MMM⁺07, PHEK99, SJP12, SHB⁺07, SYK⁺05, SYN06, WKD04, ZGZ05].

eager [FKW00]. **Earley** [Lei90]. **Early** [AB81]. **ECCS** [CDFP89]. **Edge** [DP93]. **Editing** [FL81, HT86, Nix85]. **Editor** [FM87b, DeM83, Mye18, Per90, Rep86, Wol92]. **Editorial** [AP07, App93, AG93, AF94, MP07, Mye19, Pal11a, Pal11b, Pal12, Pal13, Pal15, FP02, OP04]. **Editors** [DMM88, MM89, RTD83, Wat94]. **EDO** [OKN06]. **Effect** [Gor21, RLS⁺01]. **Effective** [BS83, Col84, JB20, KKN06, NI05, PE08, WJ98, YUW02]. **Effectiveness** [BdlBH99, SH89]. **Effects** [Boe85, MXZ⁺22, SV20, TA08b]. **Efficient** [AKBLN89, ADGM91, BB79, BGH⁺13, Bre89, Cam89, CS95, DP82, DMM88, GZ05, GZ07, GLR83, GLO88, GSO94, HVB⁺99, HS94, HSS⁺14, HIT97, JP81, Jon90, KKM90, KRS88, KPF95, MVV⁺01, MM82, NB99, NI05, PHP02, PXL95, PG21, PKH07, PA85, PA86b, RH87, SS08, SA00, SS88, TN19, WG98, YUW02, BCP08, GB99, KSV96, LPSO04, LS09, PBK⁺07, TP04, VWJB10, YF98, PA86a, SS09]. **Efficiently** [Bal94, CFR⁺91, CF95]. **Eiffel** [ACE96]. **elaboration** [KR01]. **Election** [Hua93]. **Eliminating** [BT93, Coh83, Coh85, RD03]. **Elimination** [DP93, SGL98, KKN06, KCL⁺99]. **Elimination-Based** [SGL98]. **embedded** [BCP08, CSCM00, HK07, Rhi03, SRM10, TP04, ZP10]. **Embedding** [HF87]. **Empirical** [BHK07, BDH⁺16]. **Empowering** [JSB⁺12]. **Emulator** [ML80]. **Enabled** [ADG⁺94]. **Encapsulating** [GPV07]. **Encapsulation** [AR84, RSPS23, DDM11]. **Enclaved** [BNV⁺21]. **Encoding** [Hob84, GZ05, ZP07]. **Encodings** [BC79, TY21]. **End** [BDP14, CSCM00]. **enforcement** [HMS06]. **Enforcing** [CEI⁺07]. **engines** [SS08, SS09]. **enhanced** [GH97]. **Entries** [LaL84, SS82]. **Enumeration** [BB94, JJD98]. **Environment** [CO90, SZBH86, CKT86]. **Environmental** [SKS11, SV19]. **Environments** [BS86, GKL94, HK85, HT86, Kai89, dJKVS12]. **Epochs** [Sol92]. **equalities** [FMoPS11]. **Equality** [Pal98]. **Equality-based** [Pal98]. **Equations** [HO82, Bou06, GS11, GMM99]. **Equiprobable** [PB80]. **Equivalence** [SV20, VJB12, VSS94]. **Equivalent** [PO95, NP08]. **Erlang** [TCP⁺17]. **Erratum** [SS09]. **Error** [AB81, Bac84, BN99, BF87, FL15, KC01, LaL84, MF88, MYD95, PK80, Ric85, SSS83, SS82, Wet82, ZMVPJ17, dJKVS12, Jef03, XA07]. **Errors** [AWW95, SBB⁺19, Wha94, CPRT02, JNGG10]. **Escape** [Bla03, CGS⁺03]. **ESOP** [Ahm20, Mül21, Yos22]. **ESOP'05** [Sag07]. **Essential** [DES12]. **Esterel** [Tar07]. **Estimation** [SBB⁺19]. **Estimations** [LVRG21]. **Eta** [DMP96]. **Eta-expansion** [DMP96]. **Euclid** [HW82]. **Euclidean** [Bou92]. **Evaluating** [BLH12]. **Evaluation** [AFV98, Bur84, CGST95, CK93, Gri82, Hud91, Jon90, LV94, PA85, PA86a, PA86b, RD87, RL98, Slo95, SG90, WCW90, WCW91, ZSS20, ADR06, CP96, CG04, GJ05, LDM07, Leu04, ST00b, SYK⁺05]. **Evaluations** [BDH⁺16]. **Evaluator** [Gom92, JP81, KR79, Le 88]. **Evaluators** [CP95]. **Event** [Bar81, YMW97]. **event-driven** [YMW97]. **Events** [Bal94]. **Ever** [Gri79]. **Evidence** [CGJ⁺97a]. **Evidence-Based** [CGJ⁺97a]. **Example** [CM86a, Mye90, Nix85]. **Examples** [Oss83, Jef03]. **Exception** [YB85, YB87, YB88, LS98, LP80, OKN06]. **Exception-Directed** [OKN06]. **Exception-Handling** [YB85, LS98]. **Exceptional** [WN08]. **Exceptions** [ASF17, Hau96, LP00]. **Exclusion**

[ADG⁺94, LH91, ABHI11]. **Executable** [Hob84]. **executables** [YF09]. **eXecute** [BR10]. **Execution** [BNV⁺21, CS87, Dil90, GJ93, JW17, JNGG10, JF81, SS98, SS88, BALP06, GPA⁺01, TSY00, YF98]. **Exemplars** [LaL89]. **Exemplified** [DGL⁺79]. **Exercise** [Kna90, Mis81]. **Exhaustive** [Bur90a]. **Existential** [MP88]. **existing** [LS98]. **expansion** [DMP96]. **Expansions** [SBB⁺19]. **Experience** [FSS83, Wal92]. **experiences** [Eug07]. **Experimental** [LV94, SSS83, Ven95, ABB⁺09, BGP99]. **Experiments** [Tur84]. **Explanation** [Mis81]. **Exploiting** [KOE⁺06]. **exploring** [WS97]. **exponential** [Wu04]. **exponential-time** [Wu04]. **Expression** [GP81, YB87, YB88, HVP05]. **Expression-Oriented** [GP81, YB87, YB88]. **Expressions** [BG89b, CGST95, CC97, DAW88, Fis80, Geo84, Gri82, Hen83, HY91, KS83, LdR81, PK82, Sha82, Sit79, Wat91, Dam03, NN86]. **Expressive** [MFRW09]. **Expressiveness** [WGS92, WGS93, PS96]. **Extended** [ABC⁺21, CBMO19, KGMO04]. **Extending** [CEW14, CMS03, MSRR00, MK94]. **Extensibility** [LCK⁺22]. **Extensible** [HSG17, Sto04, ATD08, MBC04]. **Extension** [Bur90b, Coh91, WSH15, Wir91, ALZ03, KKN06, LS08]. **Extensions** [Wir88]. **Extent** [MF88]. **External** [Wal80, Wal81]. **Extracting** [GP95]. **extraction** [TSL⁺02]. **extrapolation** [WM12]. **Extrema** [Pet82].

F [MWCG99]. **Facets** [ASF17]. **factoring** [DRSS96]. **Failure** [BN99, Dar90, GHH⁺19, Kar84]. **Failure-Free** [Kar84]. **Fair** [BN94, PR07]. **Fairness** [ES97, OA88, TB95, AH98]. **Families** [LaL89]. **Fashioned** [AL94]. **Fast** [ADR06, DAS98, FMoPS11, HVDH07, LT79, LZR22, SR95, DR05, PE08, TP04, VBLG04, DVLM15]. **Faster** [CGG⁺19]. **Fault** [CS95, Lam84, LJ99, AAE04]. **Fault-Tolerance** [LJ99]. **Fault-Tolerant** [CS95, Lam84, AAE04]. **FD** [GLMM05]. **FeatherTrait** [LS08]. **Featherweight** [IPW01, LST02, LS08]. **Feature** [ASAVF19, AH10]. **Feature-Specific** [ASAVF19]. **Feeding** [PA86a]. **Fence** [AKNP17]. **Few** [HL22]. **Fickle** [DDDCG02, AAD⁺07]. **field** [PKH07]. **field-sensitive** [PKH07]. **fields** [PZJ05]. **FIFO** [FLBB89]. **Final** [Kam83]. **Finding** [KRS84, KKM90, LT79]. **Fine** [DSFG21, HL22, PBR⁺15, DNS⁺06]. **Fine-Grained** [HL22, PBR⁺15, DSFG21, DNS⁺06]. **fingerprinting** [CTT07]. **Finitary** [AH98]. **Finite** [ACW90, BLH12, CES86, Dan23, GC86, PK82, PP91, Pur91, RSL10, Zav85]. **Finite-State** [ACW90, BLH12, CES86]. **Finite-State-Machine** [Zav85]. **First** [ADG⁺94, Bre89, DP97, HKMN94, Han92, JPP91, JS94, LH91, MH04, SDTF13]. **First-Class** [HKMN94, Han92, SDTF13, MH04]. **First-Come-First-Served** [LH91]. **First-Enabled** [ADG⁺94]. **First-Fit** [Bre89]. **First-In** [ADG⁺94]. **First-Order** [DP97, JPP91, JS94]. **Fit** [Bre89]. **Fixed** [SS98]. **Fixed-Order** [SS98]. **Fixpoint** [AC94, Qia00]. **Flexible** [AD98, Hud91, MSM⁺16, WG98, Wil82b, dJKVS12, IV06, KGMO04]. **Floating** [CK94, Fat82, SBB⁺19, Hau96, Mon08]. **Floating-Point** [CK94, Fat82, SBB⁺19, Hau96, Mon08]. **flop** [MMG00]. **Flow** [AR80, AD98, ASF17, Bac84, BC85b, Bur90a, DP97, DP93, FJKA06, Hor97, KD94, MMR95, NBG13, PO95, PP91, PBR⁺15, Pur91, RSPS23, Set83, SGL98, SS13, Wet82, DGS97, HR02, HY07, KBC⁺99, Pal98, PS03, RRSY08, RP88, TZ07, WJ98]. **Flow-Insensitive** [Hor97, FJKA06]. **Flowback** [CMN91]. **Flowgraph** [LT79].

Flows [Kna90]. **Floyd** [Yin11]. **Fly** [CF95, BA84, LP06, PBK⁺07, URJ18]. **fold** [RKRR04]. **Folklore** [LY98]. **Font** [FK85]. **Foo** [FA93]. **foreign** [FF08]. **Foreword** [Mye17, Mye18]. **Form** [AK87, BOV85, BM94, CFR⁺91, GSW95, Pal95, PG21, GPF08, KCL⁺99]. **Forma** [ZCG⁺07]. **Formal** [ADG⁺21, BS86, BDP14, CB80, CD79, Fid93, Gie83, HIT97, Kna90, Lee86, Mal82, MH86, Sha82, WP10]. **Formalism** [Pea21]. **Formalisms** [PCC85]. **Formalization** [BPP16]. **Formally** [SP97]. **Format** [Wat83]. **Forms** [DS83]. **formulas** [RSL10]. **formulations** [RS97]. **Fortran** [AK87, DP99]. **Foundation** [KRR18, Ban11, RAB⁺07, Rhi03]. **foundational** [AM01]. **Foundations** [GTWA14, LW93, AAR⁺10]. **Fractal** [MPM03]. **fractional** [Boy10]. **frames** [SJP12]. **Framework** [BGL93, Gie83, JW17, KRR18, NSZS13, NSTD⁺15, OHL⁺14, SGL98, TN19, ATD08, DGS97, GMM99, GZ04, GC01, Leu04, PS08, RKRR04, TP04, VBLG04, XA07, ZCG⁺07, ZP10, vHK00]. **Frameworks** [MMR95, KK07]. **Framing** [BNN18, BNN22]. **Francez** [Fra81, Moh81, Moi83]. **Free** [AP94, GEGP17, GHR80, Her91, Kar84, Kob98, Pad19, JJD98, KBP22, KSV96]. **freedom** [KS10]. **Fresh** [GMN⁺21]. **frontiers** [Ano02b]. **full** [GB99]. **Fully** [JPP91, TY21]. **function** [DR05, FF08]. **Functional** [AFV98, Ban87, Blo94, Bou05, Bur84, DW89, FL91, ISY88, JPP91, WM95, Web95, Wil82a, ABH06, Bou06, DWWW08, DF98, PS08, San96, SP97]. **Functions** [AKP94, AK82, Bou92, PB80, SM89, TY21, Lee09, MBC04, MB99, MT08, PPT08]. **Further** [CM93]. **Fusion** [JB20, LGAT00]. **Fusion-based** [LGAT00].

G. [Tic88]. **Garbage** [BA84, CN83, DSW82, ISY88, JCOMM19, TM93, URJ18, WLBF16, Wis79, YW22, BBYG⁺05, BALP06, HDH02, LP06, Piq96, TSBRO8]. **Garnet** [VHM⁺01]. **General** [BGL93, CHMY19, HSS⁺14]. **General-Purpose** [HSS⁺14]. **Generalization** [Nel89, LMD98]. **Generalized** [Ans87, BS83, GKM20, KD94, Lin79]. **Generalizing** [DB85]. **Generals** [LSP82]. **Generate** [Son87]. **Generated** [Slo95, dJKVS12]. **Generating** [HBM⁺06, HT86, Jef03, LR13, JNZ06]. **Generation** [AGT89, AS80, BOV85, BM94, DS83, DS90, GF85, GVC15, HKR92, HKR94, Pro95, Rei83, Rob79, She91, ST00b, UJ92, DAS98, MSRR00, PHEK99]. **Generative** [Gel85]. **Generator** [PPS79]. **Generators** [Cat80, GHK81]. **Generic** [LV94, DDM11]. **generics** [IV06]. **Geometry** [CR87]. **Georgeff** [NN86]. **GJ** [IPW01]. **Glanville** [MSRR00]. **Global** [Bac84, Dha91, GHB⁺96, OHL⁺14, PK80, PS92, Sch85, dHB⁺96, CS04, KBC⁺99, DS88, Sor89]. **GLR** [SJ06]. **Goal** [Dar90, Gud92, SYYH07]. **Goal-Directed** [Gud92, SYYH07]. **Goal-Oriented** [Dar90]. **Goto** [CF94]. **GPU** [BCD⁺15]. **Gradual** [TGT18, TGT20]. **Gradualizing** [LBMTT22]. **Graham** [MSRR00]. **Graham-Glanville** [MSRR00]. **Grained** [HL22, PBR⁺15, DSFG21, DNS⁺06]. **Grammar** [CI84, CP95, GF85, JP81, KR79, Web95]. **Grammar-Based** [CI84]. **Grammars** [BS88, Jon90, Kat84, LaL81, RD87, RH87, Tai79, WW95, Boy96, CP96, Wu04]. **Grammatic** [Tho94]. **Grammers** [BB94, MK94]. **Granularity** [RRB19]. **Graph** [Ass00, Bee94, BCT94, CFR⁺91, FOW87, KKSD94, KLS92, LZR22, MC82a, Son87, CTT07, GC01]. **graph-based** [CTT07]. **Graphic** [Mal82]. **graphical** [VHM⁺01]. **Graphs** [GKM20, HRB90, KPS92, Kna90, SGL98, DR05, JC97, KSK07, SGL96, UM02]. **grid** [VWJB10]. **Grimmer** [Ano18]. **groundness**

[CSS99]. **Grover** [BH99]. **growth** [BALP06]. **Guarantee** [GEGP17, LFF14, SZLY21, HQRT02]. **guarantees** [LS09]. **guard** [MP07]. **guarded** [SP07]. **Guardians** [LS83]. **Guards** [Ber80]. **Guest** [FP02, OP04, DeM83, Per90, Rep86, Wol92]. **Guide** [App94a, BDH⁺16]. **Guided** [OLH⁺16]. **guiding** [VALG05].

Hackers [App94a]. **Hancock** [CFP⁺04]. **handle** [VJB12]. **Handling** [CCEG23, Hau96, LdR81, Piq96, SSS83, UM02, YB85, YB87, YB88, CRN⁺08, LS98, LP80, SSD09, Hen83]. **Hard** [Hor97]. **Hardware** [BKL⁺97, Mis86]. **Hare** [Dan23]. **harmful** [Gor04]. **Hashing** [PB80, Duc08]. **Haskell** [GRSK⁺11, HHPW96]. **Heap** [KSK07, BALP06, KF00, YS10]. **heap-manipulating** [YS10]. **Heavily** [BG89a]. **Hennessy** [CM93, WST85]. **Herding** [AMT14]. **Heuristic** [SL92]. **hiding** [LN02, OYR09]. **hierarchic** [AG04]. **Hierarchical** [BA99, CP95, CD79, AY01, CP96]. **hierarchically** [MBC04]. **hierarchies** [ST00a, Van96a, Van96b]. **hierarchy** [KF00]. **High** [Cam89, Fat82, MSM⁺16, URJ18, CMS03, VWJB10]. **High-Level** [Cam89, Fat82, CMS03, VWJB10]. **High-Performance** [URJ18]. **Higher** [AC94, AD98, CJK95, DJP⁺16, FPS19, SV19, BBTS07, DF11, SKS11, SP97]. **Higher-Order** [AC94, AD98, CJK95, DJP⁺16, FPS19, SV19, BBTS07, DF11, SKS11, SP97]. **Highly** [Her93, Sku95]. **Hoare** [Apt81, GM81, LS84, Sok87, Yin11, dBH21]. **Hoc** [MDCB91]. **Holistic** [ZMVPJ17]. **Homomorphic** [VS22]. **Homomorphisms** [HIT97]. **HOP** [BLRS12]. **Hybrid** [KF10, KS10]. **Hyperball** [LM18]. **hyperdoctrines** [BBTS07].

I-Structures [ANP89]. **I/O** [Car95]. **Icon** [GHK81, Gri82]. **id** [Bee94]. **idempotency** [KOE⁺06]. **Identical** [FLBB89]. **Identification** [BGH⁺13, SBE⁺19]. **identify** [MMM⁺07]. **Identifying** [Ram99, SGL96]. **Idioms** [PP94]. **IDL** [Lam87]. **IEEE** [Fat82]. **Ignorance** [GNS⁺15]. **Illustrative** [Oss83]. **Immutability** [RSPS23]. **Impact** [BHM⁺19, OLH⁺16, CKT86]. **Imperative** [AB20, ABPS98, DFR15, Gro06]. **Implementation** [AKBLN89, AOC⁺88, BCD⁺15, Bou88, Bre89, BS83, CM86b, GMH81, Gaz83, Lin93, MDCB91, PXL95, RL98, WL85, CMLC06, FM87a, GB99, LDM07, LPSO04, Tra08, Zho96]. **implementations** [BBF⁺11, BFGT08, DF98]. **Implemented** [DB85]. **Implementing** [BR97, Her93, HW82, Sku95]. **Implications** [Fat82]. **Implicit** [BH05b, SJP12]. **Implicit-signal** [BH05b]. **improve** [KF00]. **Improved** [GHR80, Mur91, KK07]. **Improvement** [MS83, San96]. **Improvements** [BCT94]. **Improving** [CK94, CMB⁺95, MCT96, TCP⁺17, WS97]. **impure** [Pip97]. **Incomplete** [MRGP20, GLMM05]. **Incremental** [Bur90a, CP95, DMM88, GM79, HKR92, HKR94, HPMS00, Hud91, Kai89, Lar95, LST98, LHR19, PS92, RTD83, RP88, SGL97, WG98, YS91, BBYG⁺05, CP96, Van96a, Van96b]. **Incrementally** [QL91]. **Independence** [DHM00, GGSV22, Rep00]. **Independent** [ML80, Mul92]. **Index** [Ano86a, Ano88a, Ano89a, Ano90a, Ano91a, Ano92a, Ano94, Ano95, Ano98]. **indexed** [AM01]. **indices** [RR05]. **Indirect** [Piq96, CEG07, YK97]. **Induction** [GSW95, Sit79]. **Inductive** [LBMTT22]. **inefficiencys** [MMM⁺07]. **Inessential** [SS82, LaL84]. **Inference** [CEW14, Deb89, Hen93, LO94, LY98, MRGP20, Pad19, SR21, TB98, Wey83,

FFLQ08, JB06, PM06, PT00, PS03, Van06].
Inferring [FNBG20]. **Influence** [FTJ95].
Information [AR80, Ano82, Ano83, Ano84, Ano85, Ano86b, Ano87, Ano88b, Ano89b, Ano90b, Ano91b, Ano92b, ASF17, BC85b, HR02, NBG13, PBR⁺15, PS03, RSPS23, GS99, HY07, LN02, OYR09, TZ07].
Information-Flow [BC85b, TZ07].
infrastructure [SWU10]. **Inheritance** [LN15, WT11]. **initialization** [FM99].
Injection [SBE⁺19]. **Input** [BS83, vPS81].
Input-Output [BS83]. **Inputs** [PA86a].
Insensitive [Hor97, FJKA06]. **Insertion** [AKNP17, GJ05]. **inspection** [CF04, FG03].
Instantiation [Der85]. **Instead** [Lam84, Rem81]. **Instruction** [KPF95, LCBS19]. **Instructions** [LS80, PS93, RF97, Rob79, LPP01]. **Integer** [BAGM12, BEF⁺16, FNBG20, HSD22, BGP99]. **Integrated** [SS13]. **Integrating** [HPR89, WJS⁺00]. **Integration** [CO90, Leu04]. **Intensional** [STS03].
Interaction [WSH15, WT11, van88, BCM99].
Interactions [GDF23, JS94]. **Interactive** [ACS84, BS86]. **Interconnectability** [TY18]. **Interface** [Win87, van88].
Interfaces [DS90, Mye90, TLHL11, WT11].
Interferences [FTJ95]. **Interfering** [Jon83]. **Interleaved** [LZR22].
Interleaved-Dyck [LZR22]. **Intermediate** [Lam87, Pem83, TvS82]. **Internal** [Han81a].
International [Wol92]. **Interoperability** [Ano18, GSS⁺18]. **interoperable** [BFGT08].
Interpretation [BGL93, CFG⁺97, DC22, DLR16, KRR18, LV94, MSJ94, BDL⁺08, BdlBH99, DGG97, Leu04, SYH07].
Interpretation-Based [DLR16].
Interpretations [CMB⁺95, HY91, SJ03].
Interpreters [LR13, CEG07].
Interprocedural [Bur90a, BT93, DP97, HAM⁺05, HS94, HBCC99, HRB90, LWR21, ML21, NR06, SH89, CKT86, DVD07, DGS97, FMoPS11, JLRS10, KK07, RLS⁺01].
Interprocess [RS84b]. **Interprocessor** [Ang89]. **Interruptible** [BNV⁺21].
intersection [Dam03]. **Intertask** [FY85].
Interval [Bur90a, GNS⁺15, FH04].
Interval-Based [Bur90a]. **Introduction** [Ahm20, DeM83, HCW82, Mül21, Per90, Rep86, Sag07, Wol92, Yos22]. **Invariant** [BKB80]. **Invariants** [Cla80, GEGP17].
Irreducible [Hav97, UM02]. **irregular** [YF98]. **Irrelevant** [GP81]. **Iso** [LBN17, ZZO22]. **Iso-Recursive** [LBN17, ZZO22]. **Isolation** [Wha94].
Isomorph [JJD98]. **Isomorph-free** [JJD98]. **Issue** [Ahm20, Ano18, TGT20, Yos22, Sag07].
Issues [BO94]. **Iterable** [Gor21]. **Iterated** [GA96]. **Iteration** [Cam89, MOSS96, GS11, JLF02, Qia00].
Iterative [Ans87, Par90, DR05, JNGG10, LS04].
Jade [RL98]. **Jam** [ALZ03]. **Java** [AFF06, ALZ03, AAD⁺07, BH05a, Bla03, BALP06, CGS⁺03, CMS03, CSCM00, FFLQ08, FM99, GPF08, IPW01, KKN06, KGMO04, KN06, KR01, LST02, LP06, LS08, Loc13, MVV⁺01, MME⁺10, MFRW09, MMG00, NR06, OKN06, Qia00, RRB19, SLC03, SMP10, SBE⁺19, SA99, SYK⁺05, TN19, TSL⁺02, WR08]. **Java-like** [KN06].
JavaCOP [MME⁺10]. **JavaGI** [WT11].
join [WKD04]. **JR** [KGMO04]. **Jump** [LS80, RS84a]. **Just** [DLR16, TN19, SYK⁺05]. **Just-In-Time** [TN19, DLR16, SYK⁺05]. **JVM** [HO07].
KaffeOS [BH05a]. **Kaiser** [Tic88]. **Kernels** [BCD⁺15, ATD08]. **Keys** [PB80]. **Kilbury** [Lei90]. **Kitsune** [HSS⁺14]. **Kleene** [Koz97].
Knot [MC82a]. **knowledge** [GLMM05].
labels [Sto04]. **Laboratory** [Bor81].
LaLonde [Hen83, LaL83]. **LALR** [DP82, KM81, PCC85]. **Lambda**

[Geo84, Gom92, NN86, PS08]. **Laminar** [PBR⁺15]. **Lampport** [Ang89, Pet83b]. **Language** [ACPP91, AOC⁺88, Ano18, ABPS98, BS86, BPP16, BO94, Bor81, BC91, DVLM15, Fat82, Fea87, FFF⁺18, GSS⁺18, Gud92, Hal85, HSG17, JMSY92, JPP91, Kai89, LVRG21, McG82, Per79, PPS79, RTD83, RCS93, Spo86, SNS⁺14, SDD21, Tur84, Wet82, Win87, YS91, YB87, dJKVS12, van88, Bou05, BSvGF03, CFP⁺04, DWWW08, DF98, FM99, Gro06, HBJ98, KN06, LP99, MF09, MWCG99, PPT08, PHEK99, Tra08, VHKO02, HCW82, YB88]. **Language-Based** [Kai89, RTD83]. **Languages** [Ano18, AR84, AD98, Bar81, BL94b, BHM⁺19, Blo94, BM94, BWP87, CDFP89, Dug99, Fos96, FL91, HU96, Lee86, LR19, LMM21, MSM⁺16, Mur91, Ryu16, SV19, TK94, TGT20, AAR⁺10, ACM11, DHM00, GW99, RS97, Rhi03, SRW98, SKS11, SP97, SWU10, Wol92]. **Larch** [Win87]. **Large** [GLR83, HSD22, MK94, MH86, WCW90, WCW91, ZSS20]. **Large-scale** [ZSS20]. **Lattice** [AKBLN89, MMR95, FH04]. **Lauer** [GM81]. **Layout** [KK98, LVV⁺83, GPWZ08, KF00]. **Lazy** [ABM93, FKW00, HKR94, Hud91, ITF⁺22, TCVB14, Chi05]. **LCF** [Sok87]. **lead** [SS05a]. **Leader** [Hua93, KKM90]. **leak** [HDH02]. **learned** [VHM⁺01]. **Learning** [CGJ⁺97a, HOYY18, JJCO19, SR21]. **Least** [AB81, Bac84]. **Least-Cost** [AB81, Bac84]. **Left** [FKW98]. **Left-Linear** [FKW98]. **legacy** [NCH⁺05]. **length** [SMP10]. **Lessons** [URJ18, VHM⁺01]. **Let** [LY98]. **Let-Polymorphic** [LY98]. **Level** [Cam89, Fat82, GP95, YBL16, CMS03, VWJB10]. **Lexical** [HKR92]. **libraries** [Dug02]. **LIFE** [AKP94]. **lifetime** [HBM⁺06]. **Lifetimes** [Pea21]. **Lightweight** [Pea21, SW97b]. **Like** [Hua90, KN06]. **Limitations** [CP17]. **Linchpin** [BGH⁺13]. **Linda** [Gel85]. **Line** [Bal94]. **Linear** [BL94b, FKW98, PS99, RS84a, YR94, BKRW98, BKRW05, FMoPS11, KBC⁺99, Ram99, Rep98, RM10]. **Linear-Time** [YR94, BKRW98, BKRW05]. **Linearity** [KPT99]. **Linearizability** [HW90, DSW11]. **Linguistic** [LS83, Wei90, FGM⁺07a]. **Link** [DDD05]. **Link-time** [DDD05]. **Linking** [QL91, Dug02]. **LIPS** [CDFP89]. **LISF** [GCRN11]. **LISP** [Mul92, Pip97, SH89, Wat83]. **List** [BC79, HIT97, Kau84, Sij89]. **listing** [MDJ05]. **Lists** [Dan23]. **Literature** [Oss83]. **Live** [DSFG21, MWB94]. **Live-Structure** [MWB94]. **Liveness** [ACW90, GC86, OL82, RY88, HDH02]. **LL** [BF87]. **LLVM** [HL22]. **Load** [KPF95]. **Loaded** [BG89a]. **Local** [BDFZ09, CBDGF95, PT00, SDB20, TSBRO8, Wei89, Dam03, San96]. **Locality** [BAC16, MCT96, VALG05, ZSD09]. **Locally** [AB81, Bac84, Min84]. **locating** [JNGG10]. **Locator** [ZMVPJ17]. **Lock** [GEGP17, KS10]. **Lock-Free** [GEGP17]. **lock-freedom** [KS10]. **locking** [AFF06]. **LOCKSMITH** [PFH11]. **Logic** [AS89, AFV98, Apt81, BNNN22, BGL93, BL87, BCD90, BDJ13, BMPT94, CS04, CES86, CFM94, DW89, Deb89, DL93, Deb95, DJP⁺16, JPP91, Kar84, LS84, Lam94, MW84, MSJ94, MMG92, PZ22, SS98, Sok87, TK94, TB95, dBH21, BBTS07, BMR01, BCG⁺07, BdIBH99, CU08, CG86, CSS99, DDV99, DPPR00, GHB⁺96, GW99, HVB⁺99, HPMS00, KWL09, LMD98, Leu04, PM06, RKRR04, SRW02, Yin11, dHB⁺96]. **Logical** [BNN18, GGL15, GS98, TY18, RSL10, Tar07]. **Look** [DP82, GMN⁺21]. **Look-Ahead** [DP82]. **Lookahead** [KM81, MF88]. **Loop** [BAC16, CS87, MCT96, Sit79, RKSR12]. **Loops** [BAGM12, Boo82, CK94, DB85, FTJ95, Hav97, Wat91, Ano02b, LS04, LSLR05, Ram99, RDG08, SGL96, UM02]. **low** [CSCM00]. **low-end** [CSCM00]. **Lower**

[FNBG20, PW94]. **LR** [ADGM91, BL94b, BF87, CPRT02, DMM88, Jef03, JP17, KC01, LaL81, LaL84, SS82, ST00b]. **LR-based** [KC01].

M [Bur91, Mul92]. **M-LISP** [Mul92]. **Machine** [CGJ⁺97a, Cat80, GNS⁺15, Gie83, Han94, JJCO19, LR13, ML80, RF97, SS98, SDB20, Wal92, Zav85, Ano02a, CEG07, CF04, HK07, KN06, Oho07, RRB19]. **machine-checked** [KN06]. **Machine-Code** [LR13]. **Machine-Independent** [ML80]. **Machine-Learning** [JJCO19]. **Machine-Specific** [Gie83]. **machinery** [FKW00]. **Machines** [ACW90, Bee94, CGST95, GC86, KK98, PS93, PP91, Rob79, RCRH95, AY01, AG04, ABE⁺05, ABS09, TSY00, Pur91]. **Made** [LM22]. **Madsen** [Ell82, SM82]. **Magma2** [Tur84]. **Maintenance** [GKL94]. **Making** [JC97, Loc13]. **malware** [PCJD08]. **Management** [JP81, Mur91, SDB20, van88, BP12, WCM00, Zho96]. **Managing** [Bob80]. **Manifest** [SIG17]. **manipulating** [YS10]. **Manipulation** [DVLM15]. **Manipulations** [SBS22]. **many** [AE98]. **massive** [BHK07]. **Massively** [CGST95]. **Matching** [AC96, AGT89, CP95, KPS92, ADR06, Van06]. **Matching-Based** [CP95]. **materializations** [RMH06]. **Mathematical** [Ban11, Hes88, LW93]. **MATLAB** [DP99]. **MATLAB(R)** [JB06]. **Matrix** [FTJ95]. **Matrix-Vector** [FTJ95]. **Maximal** [BG89b, Rep98]. **Maximal-munch** [Rep98]. **Maximization** [GLO88]. **Maximum** [Kna90]. **May** [Hor97]. **May-Alias** [Hor97]. **MCALIB** [FL15]. **Measures** [NcS20]. **Measuring** [FL15]. **Mechanically** [DSW11]. **Mechanism** [CO90, YB85, DNS⁺06]. **Mechanisms** [Rei83, HMS06]. **Mechanizing** [Pau01]. **Median** [Com80]. **Medians** [KRS84]. **megaflops** [MMG00]. **member** [KF00]. **Memory** [AMT14, CK94, Cha93, CBMO19, FSH23, KZC15, KK98, KRS88, LB22, MSM⁺16, Mis86, RCRH95, SS88, ABHI11, BP12, GMM99, GW99, JNGG10, KF00, LK02, Loc13, QR00, RR05, TSY00, TP04, VBLG04, WCM00, MMM⁺07]. **memory-efficient** [TP04]. **memory-hierarchy** [KF00]. **Merge** [Ber94]. **Merlin** [HBM⁺06]. **Message** [CSW06, SS84, VMLY22, Gor04]. **Messages** [BB79, Jef03]. **meta** [Tra08]. **meta-programming** [Tra08]. **Metalevel** [Jag94]. **Metaprogramming** [CI84]. **Method** [BNN18, BCD90, BF87, HL82, Jon83, Loe87, JJD98]. **Methodology** [Ban87, Her93, Sku95]. **Methods** [DAW88, KM81]. **METRIC** [MMM⁺07]. **Mezzo** [BPP16]. **Microanalysis** [HCHP92]. **Microcode** [MV87]. **Microprocessors** [BNV⁺21]. **Middle** [BDP14]. **Middle-End** [BDP14]. **Might** [Bee94]. **migration** [Piq96]. **Minification** [HLH19]. **Minimal** [FKW98, IPW01]. **Minimization** [RS84a]. **minimizing** [RMH06]. **Minimum** [GHS83]. **Minimum-Weight** [GHS83]. **Mining** [AMT14]. **Misled** [Cop94]. **miss** [GMM99]. **Mixin** [HL05, RD13]. **mixins** [ALZ03]. **ML** [Blu99, CBMO19, HM93, HT04, PS03, RD13, Spo86]. **Mobile** [LS03, VHB⁺97, BCC04, KS10, SWU10]. **mod** [Bou92]. **Modalities** [SV20]. **mode** [PS08, ZP10]. **Model** [AY01, Ang89, BK11, BL87, BGP99, CGL94, DLR16, ES97, GS98, GG85, GL94, Han81a, HW82, Hol87, JB20, JJCO19, KH92, MSM⁺16, MMG92, ND16, VSS94, ACM11, AM01, AE01, JJD98, JPS⁺08, KN06, KV00, Loc13, NP08, QR00, SG04, VWJB10, VALG05, YMW97]. **Model-Checking** [ES97, BGP99]. **Modeling** [AF84]. **Modelling** [AMT14, ADG⁺21]. **Models** [FSH23, GJ93, KZC15]. **Modern** [BCF04, LMM21, YW22, RAB⁺07]. **Modes** [Deb89]. **modest** [LS08]. **Modification** [Lei90, RLS⁺01]. **Modula** [EO80].

Modular [AG04, BMPT94, CDK⁺18, EMH20, GL94, JBK18, Jag94, KKM90, LN15, MBC04, Wei89, YB85, dJKVS12, KV00, MFRW09, MOS07b]. **modularity** [BA99]. **Module** [PAS⁺15, RD13]. **Modules** [CL95, HW82, Lam83, HL05]. **Modulo** [FSH23]. **Monadic** [DG19, MH04]. **Monitors** [BLH12, BH05b]. **Monolingual** [HK85]. **Monte** [FL15]. **Morel** [Dha91, DS88, Sor89]. **Morphing** [HS11]. **Morris** [Wis79]. **Mostly** [YF09, BBYG⁺05]. **Motion** [KRS94, Hai98]. **MPI** [FJK⁺17, TSY00]. **Multi** [Ano18, GSS⁺18, ITF⁺22, MF09]. **Multi-Language** [Ano18, GSS⁺18, MF09]. **Multi-threaded** [ITF⁺22]. **Multialgebraic** [WM95]. **multidimensional** [RDG08]. **MultiJava** [CMLC06]. **Multilisp** [Hal85]. **multimethod** [DAS98]. **Multimethods** [CL95]. **Multiparty** [JS94]. **Multiple** [ASF17, NSTD⁺15]. **Multiply** [FTJ95]. **Multiprocess** [Lam79, Lam80]. **Multiprocessing** [ABR81]. **Multiprocessor** [GP81]. **Multiprocessors** [Cha93, KRS88]. **Multisource** [MMR95]. **Multithreaded** [EGP14, JBK18, JSB⁺12, KKW14, NR06]. **Multivariate** [HAH12]. **Multiway** [Cha87, Van96a, Van96b]. **munch** [Rep98]. **Mutandis** [SHB⁺07]. **Mutatis** [SHB⁺07]. **Mutual** [LH91, ABHI11]. **Mutual-Exclusion** [LH91]. **Myths** [Gor04].

n [CKT86]. **Naming** [BDP93]. **Natural** [GZ04, dJKVS12, ACE96]. **Neighborhood** [BG89a]. **Neighborhood-Constrained** [BG89a]. **Nested** [Cha93, DDMP22, NB99, ACM11]. **Nesting** [Hav97, Boy10]. **Nests** [BAC16]. **Net** [JTM98]. **Network** [WGS92, WGS93]. **Networks** [CGJ97b, GC86, KRS84, dBB85]. **Newtonian** [RTP17]. **Nicholson** [FA93]. **No** [Ano18, TGT20]. **node** [JC97, UM02]. **Nodes** [CF95, Han81a]. **Nomadic** [SWU10]. **Nominal** [CU08]. **Non** [CFG19, DL18, LLK⁺17, Mye18, BS88]. **non-** [BS88]. **Non-Deterministic** [Mye18, DL18]. **Non-polynomial** [CFG19]. **Non-Statistical** [LLK⁺17]. **Noncanonical** [Tai79]. **Noncorrecting** [Ric85]. **Nondeterminate** [TK94]. **Nondeterminism** [Ber80, CCEG23, Hes88, WM95]. **Nondeterministic** [QG95, MT08]. **Noninterfering** [HPR89]. **nonnumerical** [ME97]. **Nonprocedural** [PPS79]. **nonrectangular** [JLF02]. **nonscalars** [CRN⁺08]. **Nonsequentiality** [Bar81]. **Nonstrict** [Blo94]. **Nonterminating** [ML21]. **Nontermination** [PM06]. **normal** [LMD98]. **Normalize** [CRN⁺08]. **norms** [BCG⁺07]. **Notation** [Rem81, Wil82b]. **Note** [Com80, CM93, MS88, WST85, Coh85, Pal11b, YK97]. **Notes** [Sku95]. **Nothing** [BDH⁺16]. **Notion** [LW94]. **NP** [Hor97]. **NP-Hard** [Hor97]. **NQLALR** [BS88]. **nulled** [SJ06]. **Number** [Ste22]. **Numbers** [GLR83]. **numeric** [Hau96].

O [ABPS98, Car95]. **Object** [DF84, HU96, KH92, Ryu16, Ste22, WCW90, WCW91, BSvGF03, DMM01, DDDCG02, FM99, GPWZ08, HBM⁺06, JPS⁺08, LPSO04, Piq96, WJS⁺00]. **Object-Based** [KH92]. **Object-Oriented** [HU96, Ryu16, Ste22, BSvGF03, DMM01, JPS⁺08, WJS⁺00]. **Objects** [AM85, CJK95, HF87, HW90, Her93, SM89, VHB⁺97, Wal80, Wal81, Win84, GPV07, HBJ98, KF00, Sto04, WJS⁺00, Sku95]. **obligations** [DSW11]. **Observability** [Gaz83]. **Observation** [LWR21]. **Observations** [Sha82]. **Obsidian** [COE⁺20]. **Occur** [AP94]. **Occur-Check-Free** [AP94]. **Octagons** [GMN⁺21]. **Off** [SBB⁺19]. **Offline** [CG04, GJ05]. **Old** [AL94]. **Old-Fashioned** [AL94]. **Omnisemantics** [CCEG23].

On-Line [Bal94]. **On-The-Fly** [CF95, BA84, URJ18, LP06, PBK⁺07]. **One** [Bak82, BG89b, VHM⁺01]. **One-Pass** [Bak82]. **one-way** [VHM⁺01]. **online** [CG04, HVDH07]. **only** [PZJ05]. **OO** [RSPS23]. **Opacity** [QG95]. **OpenJDK** [YW22]. **Operating** [HLH⁺23, HM84, BCP08]. **Operational** [BLRS12, Han94, MF09]. **Operations** [AKBLN89, CK94, Lee86, LS79]. **Operator** [CSV01, Hen83, LdR81]. **Operators** [Ive79, She91]. **Optimal** [BOV85, CGST95, FK85, JCMM19, KRS94, Lar95, PB97, Hai98, JNZ06, KSV96, MSRR00]. **optimality** [CP96]. **Optimally** [BL94a]. **Optimistic** [PM04]. **Optimization** [Bee94, BBC16, Blo94, BAC16, BT93, DF84, DP97, DDH84, Dha91, DS88, FOW87, HG83, HOYY18, Pem83, PP94, RRB19, SS82, Sor89, TvS82, Web95, Ass00, BHK07, KBC⁺99, KF03, PE08, TVA07, ZP10, CG95, LaL84, OKN06]. **Optimizations** [CC95, JSB⁺12, CGS⁺03, CKT86, GMP⁺00, SYK⁺05]. **optimize** [DMM01, VBLG04]. **Optimized** [CM93, Cop94, Hen82, WST85, DS98, UM02]. **Optimizer** [DF80, FSS83, DF81]. **Optimizers** [Gie83]. **Optimizing** [CEG07, KMM⁺98, LSLR05, ML80, NSZS13, QR00, BGKR09]. **Or-Parallel** [GJ93]. **orchestration** [PE08]. **Order** [AC94, AD98, Bur84, CJK95, DP97, DJP⁺16, JPP91, JS94, SS98, BBTS07, DF11, FPS19, SKS11, SV19, SP97]. **Ordering** [FSH23, GS99]. **Organization** [Han81a]. **Oriented** [Bor81, Dar90, Ell82, FFF⁺18, GTWA14, GKL94, GP81, HU96, Ryu16, SM81, Ste22, Tur84, YB87, YB88, BSvGF03, DWWW08, DMM01, JPS⁺08, WKD04, WP10, WJS⁺00]. **origins** [San09]. **OSI** [CDFP89]. **Output** [Ber80, BS83]. **overflow** [KOE⁺06]. **overhead** [BP12, SS96]. **overlays** [SWU10]. **Overload** [Bak82]. **overloading** [SS05b]. **Overview** [AOC⁺88]. **ownership** [DDM11, SS96]. **Oz** [VHB⁺97].

Package [Hil88]. **Paper** [GM81]. **Parallel** [ANP89, BG22, BOV85, BO94, BE13, Cha93, CGST95, CMN91, CL94, DS83, Fos96, GLO88, GJ93, GPA⁺01, HCHP92, HIT97, JF81, Kna90, LHR19, Mis94, NSZS13, OA88, Rao94, SS88, VMLY22, BBYG⁺05, CG86, GB99, HBJ98, KSV96, LK02, MVV⁺01, RR03, YF98]. **Parallelism** [Bur84, GP95, KSV96, NB99, PW94, TCVB14, YBL16]. **Parallelization** [BAC16, BDJ13, PP94, BdlBH99, HAM⁺05]. **Parallelizing** [HP96, ME97, RD97]. **Parameter** [Gaz83, Zho96]. **Parameterization** [TWW82]. **Parameterized** [CGJ97b, CK93, Gaz83, RKSr12]. **Parametric** [HFC09, MMG92, SRW02, IV06]. **Parametricities** [DPP22]. **Parenthesis** [AS80]. **Parlog** [CG86]. **Parsed** [Wad90]. **Parser** [DDH84, JP17, LaL84, SS82]. **Parsers** [BN99, LaL81, MYD95, PK80, CPRT02, SJ06, ST00b]. **Parsing** [CH87, DMM88, Fis80, GM79, Lar95, RH87, Sam80, WG98, KC01]. **Part** [LaL81, PA85, PA86a, PA86b, Apt81]. **Partial** [AFV98, CP17, CK93, DS88, Gom92, KCL⁺99, Sor89, ADR06, BP12, CG04, GJ05, LMD98, Leu04, ST00b]. **Partially** [BLH12, Kob98, RRSY08]. **partially-flow-sensitive** [RRSY08]. **partitioning** [RM07, YF09]. **Parts** [Son87]. **Pascal** [LS79]. **Pass** [Bak82, BM94]. **Passing** [BDM15, Gaz83, SS84, VMLY22, CSW06, Gor04, Zho96]. **Passive** [AKP94]. **past** [PM09]. **Path** [Blo94, ClJGP18, SMP10]. **path-length** [SMP10]. **Patient** [FFF⁺18]. **Patient-Oriented** [FFF⁺18]. **Pattern** [EGP14, ADR06, Jay04, MTSS09, Van06]. **Pattern-Based** [EGP14]. **Patterns** [GH80].

PDS [Han81b]. **PEAK** [PE08]. **Peephole** [DF80, DF81, Pem83, TvS82]. **PegaSys** [MH86]. **Pennello** [Sag86]. **Perfect** [Duc08]. **Performance** [HU96, MSM⁺16, PB80, URJ18, KF00, PE08]. **Performed** [Coh91, Wir91]. **Permission** [BPP16, SNS⁺14]. **Permission-Based** [BPP16, SNS⁺14]. **permissions** [Boy10]. **Persistent** [AM85]. **Petri** [JTM98]. **Petri-Net-Based** [JTM98]. **Phases** [Bar81]. **Philosopher** [CM84]. **Philosophers** [MS88]. **Pi** [BG22, HR02, KPT99]. **Pi-calculus** [BG22, HR02, KPT99]. **pict** [SWU10]. **Pictures** [MH86]. **Pipeline** [HG83]. **Pipelined** [BG89b, LPP01, RDG08]. **pipelining** [ME97]. **pitfalls** [Mon08]. **PL** [CD79, CZ84, FFF⁺18]. **PL/CS** [CD79]. **PL/CV3** [CZ84]. **place** [GW99]. **Placement** [DP93, GS99, vHK00]. **Platform** [TCP⁺17]. **pluggable** [MME⁺10]. **Plurals** [Ste22]. **Pluto** [BAC16]. **Point** [CK94, Fat82, SBB⁺19, GJ05, Hau96, Mon08]. **Pointer** [LTMS20, LHR19, LS79, RR03, SDB20, HBCC99, HVDH07, PKH07, RLS⁺01]. **Pointers** [SS13, RR05]. **Points** [GKM20, WKD04]. **Points-to** [GKM20]. **Pointwise** [VSS94]. **Policies** [NKG13, BDFZ09, FGM07b]. **Policy** [Kro82, Kro83, Kro84, Kro85, Kro86, Kro87, Kro88, Kro89, Kro90, Kro91, Kro92, UJ92, BFG08]. **policy-based** [BFG08]. **Polyhedra** [GVC15]. **Polyhedral** [GVC15, QR00]. **POLYLITH** [Pur94]. **PolyMage** [JB20]. **Polymorphic** [BMR05, Dug99, Gor21, HT04, Hen93, KTU93, LO94, LY98, Oho95, SIG17, SV96, TY21, WJ98, BSvGF03, DWWW08]. **Polymorphism** [Bur90b, MDCB91, HFC09]. **polynomial** [BAL07, CFG19]. **PolyTOIL** [BSvGF03]. **polyvariance** [LMD98]. **Polyvariant** [AC94, WJ98]. **POP** [FFF⁺18]. **POP-PL** [FFF⁺18]. **Portable** [DDH84, Han81b, HK07]. **Porting** [HLH⁺23]. **Possibly** [JP17, ML21]. **Postfix** [DS83]. **Postpass** [HG83]. **Power** [TWW82, SSD09]. **Powerlist** [Mis94]. **PPMexe** [DKV07]. **PQ** [GZ05]. **PQ-encoding** [GZ05]. **Practical** [AD98, BAC16, BF87, CP17, Dha91, LR19, ND16, PBR⁺15, SS13, TSL⁺02, WC97, Bou05, DR05, DVD07, DGS97, JNZ06, PFH11]. **Practice** [KRS94, Ryu16, Bla03, DRSS96]. **Pragmatic** [BDH⁺16]. **Pragmatics** [Gom92]. **Pre** [OLH⁺16]. **Pre-Analysis** [OLH⁺16]. **Precedence** [Hen83, LdR81]. **Precise** [CDK⁺18, FJK⁺17, GKM20, Hor97, TN19, PHP02]. **Precise-Yet-Efficient** [TN19]. **precision** [ZGZ05]. **Precondition** [Boo82]. **Predicate** [Lam90, BMR05, Bou05, Bou06, MFRW09, MMS96, PR07]. **Predicates** [CBDGF95, Lam88]. **predictable** [SHB⁺07, HK07]. **Prediction** [CGJ⁺97a, CEG07, YS99]. **Predictive** [FJK⁺17]. **Prepaging** [FK85]. **Prescription** [FFF⁺18]. **Presence** [AWW95, CF94, KTU93]. **preserving** [DHS09, LST02]. **pretenuing** [BHM⁺07]. **Pretty** [Chi05]. **Prettyprinter** [Wat83]. **Prettyprinting** [Opp80]. **Primitive** [App15]. **principals** [TZ07]. **Principled** [LTMS20]. **Principles** [Bou88, DRSS96]. **printing** [Chi05]. **Priority** [CH90, Fid93]. **Priority-Based** [CH90]. **Privacy** [BKOZB13, LVRG21]. **Privileges** [Min84]. **Probabilistic** [AB20, BKOZB13, CFNH18, DG19, HSP83, MMS96, OGJ⁺18, Rao94, SV19, BH99, PPT08]. **Problem** [ADG⁺94, CM84, DS88, Gho93, LSP82, MS88, Pet82, Pet83b, PB97, Sor89, FGM⁺07a, Wu04]. **Problems** [Bac84, CFNH18, DP93, MMR95, SRW98]. **Procedural** [HF87, Lin93, VSS94]. **Procedure** [CDK⁺18, GS99, GL80]. **Procedure-Modular** [CDK⁺18]. **Procedures** [AM85, Kat84, NO79]. **Process** [Kob98, vPS81, WP10].

process-oriented [WP10]. **Processes** [AFdR80, Bag89, FDY12, HM84, KS79, MW84, MC82b, Oss83, RY88, Sou84, TY18, dBB85, AE98, KS10, Ber80, Moi83].

Processing [GH80, HSG17, Rei83].

Processor [BG89b, Bud84]. **Processors** [GLR83, Per79, LPP01, ZP10]. **Product** [EMH20, RTP17]. **Production** [Wad90].

Productivity [Sij89]. **Profile**

[BHM+07, YUW02]. **Profile-based**

[BHM+07]. **Profiling**

[ASAVF19, BL94a, SP97]. **Program**

[Bal94, BNNN22, Bar85, BAL07, BKB80,

Col84, DKKL18, Der85, FPS19, Fea82,

FOW87, FT94, FL91, HSP83, HKR94,

HSD22, HLH+23, Jen97, JJCO19, KKW14,

KWL09, Lam83, Lam88, LFF14, LWR21,

MS83, MW80, Mis81, Nie85, PP94, PPS79,

Rem81, RTP17, SBS22, TSY00, Wat94,

Wey83, ZSD09, Ass00, DDD05, GZ04, KF03,

LH08, NS13, Pau01, RAB+07, SLC03,

WZ07, WN08, YF09, DKV07].

Programming [AGT89, Ano18, AR84,

ABPS98, BS86, BPP16, BHM+19, BL87,

Bir84, Bor81, BMPT94, BWP87, BCEM15,

CHY12, COE+20, CL94, Dar90, DFR15,

DGL+79, Dug99, FFF+18, Fos96, FL15,

GTWA14, Har80, HK85, HO82, Kai89,

KH92, Lee86, LVV+83, LMM21, LVRG21,

MK94, Mye90, OGJ+18, Pet83b, RCS93,

SS84, Ste22, SNS+14, SZBH86, TK94,

TGT20, ZSO21, ABH06, BMR01, Bou06,

BdIBH99, CU08, CG86, CKT86, DWWW08,

DPPR00, GW99, HBJ98, JPS+08, KGMO04,

MVV+01, MTSS09, MQ05, Tra08, VWJB10,

WKD04, WJS+00, Bir85, SWU10].

Programming-in-the-Large [MK94].

Programs [AWW95, AK87, AFV98, AB20,

AR80, AP94, AC94, BL94a, Ban87, BGL93,

BC85a, BC85b, Ber94, BCD90, BE94, BE13,

BEF+16, CR87, CB80, CM86a, Cha93,

CFNH18, CFG19, CEW14, CMN91, Cla80,

CFM94, CS87, DSFG21, DL18, DGMP97,

DW89, Deb89, DL93, Deb95, DP97, Dil90,

EMH20, EGP14, FJK+17, FNBG20, GG85,

GM81, Har80, HCHP92, HPR89, How80,

HIT97, ISY88, ITF+22, JBK18, JW17,

Jon83, JF81, Kna90, Lam79, LS83, MSJ94,

ML21, MTK21, MRGP20, MH86, Mye18,

NSZS13, OA88, OL82, PS92, QL91, Rao94,

SS98, Sch82, SSS81, SS88, TOUH21, TN19,

VMLY22, Ven95, Wad90, Web95, Wil82a,

AE01, AAE04, BCG+07, CSW06, CSS99,

DP99, DDV99, DS98, DMM01, EGM01,

GM12, GHB+96, GH97, GPA+01, Hau96,

HPMS00, JPS+08, KSV96]. **programs**

[LMD98, Leu04, LS09, MF09, NR06, PM06,

RKRR04, RR03, San96, VJB12, WM12,

YS10, Yin11, dHB+96, Bur84, Lam80].

PROLOG

[LV94, AP94, AB94, BC91, CH87, FA93,

GPA+01, MWB94, NF89, Zho96].

Promotion [Bir84, Bir85]. **Proof**

[AFdR80, BDJ13, FRW90, GL80, Moi83,

Sag86, SS84, Sok87, WGS92, WGS93, AM01,

DSW11, Oho07]. **proof-carrying** [AM01].

Proof-Directed [BDJ13]. **Proofs**

[Apt86, BC85a, CM86b, JW17, LY98, Oss83,

GRSK+11]. **Propagation** [SR95, WZ91,

Apt00, CP96, SS05a, SS08, SS09].

Properties

[ACW90, AS89, CIJGP18, Kar84, LM18,

OL82, RY88, TB95, Wei89, YS10].

Prophecy [LM22]. **Proposed** [Fat82].

prossima [MP10b]. **Protected**

[PAS+15, WJS+00]. **Protocol** [SL92, YS97].

Protocols [MB83, BFGT08, SS96].

Prototype [WCW90, WCW91].

Prototypes [HW82]. **Provably**

[SDB20, GB99]. **Provenance** [ZSS20].

provenly [AAD+07]. **Proving** [DGMP97,

GC86, Hen86, Kar84, Lam79, Lam80, OL82].

Pruning [BN99]. **PSG** [BS86]. **PSO**

[FSH23]. **publish** [Eug07].

publish/subscribe [Eug07]. **Pure**

[BNN18, HU96, Pip97, Tar07]. **Purpose**

[App94b, HSS+14, Spo86]. **Pushdown**

[CBMO19]. **PYE** [TN19].

qualifiers [FJKA06]. **Qualitative** [CFNH18]. **Quality** [BHM⁺19].
Quantification [Vol91, Bur91]. **Quantified** [Gro06, STS03]. **Quantitative** [CFNH18].
Quantum [FDY12, BH99, Yin11]. **Queries** [Bal94, CGG⁺19]. **Queuing** [BB79].
Quiescence [CM86a].

R [AW82, CKT86, KMM⁺98]. **R.** [Tic88].
race [AFF06, PFH11]. **Races** [KZC15].
Random [AS80]. **Randomized** [TOUH21].
Range [CG95]. **Rank** [Dam03]. **Ranking** [Lee09, TOUH21]. **Ratio** [CK94]. **rational** [GS11]. **rationale** [CMLC06]. **Reach** [FKW98]. **Reachability** [LZR22, NS13, TOUH21]. **Reactive** [DFR15, AG04, DGG97]. **read** [AE01, PZJ05]. **read-only** [PZJ05]. **read/write** [AE01]. **Readable** [Spo86]. **Reading** [Pet83a]. **Real** [AL94, MMG92, RS84b, GH97, HK07, LS98, YMW97]. **Real-Time** [MMG92, RS84b, GH97, HK07, LS98, YMW97]. **realities** [Gor04]. **Reals** [DK17]. **Reasoning** [BKOZB13, BLRS12, BDP93, BP82, BH99, CB80, DSFG21, Lam88, LN15, Rao94, SDB20, dBH21, TSBRO8]. **receive** [Gor04]. **receptive** [ABL03]. **Recipe** [AL94]. **reclassification** [DDDCG02]. **recognition** [ATD08]. **Recognizer** [GHR80]. **Recognizing** [BL94b]. **Recombination** [Kau84]. **Recombination-Delaying** [Kau84]. **Recompilation** [BT93, SK88, Tic86, Tic88]. **Reconciling** [HU96]. **Reconstruction** [YR94]. **Record** [LS79, Oho95]. **Recovery** [AB81, ACS84, Bac84, BF87, GHH⁺19, PK80, Ric85, dJKVS12]. **recurrences** [VJB12]. **Recursion** [AK82, Col84, Hen93, KTU93, Mis94, YK97]. **Recursive** [AC93, AK82, Ban87, CFG19, Coh83, Coh85, LBN17, Sij89, ZZO22, ABE⁺05, AM01, CF04, Dug02, Pal98]. **Recursively** [BE13]. **Reduce** [BN99, MYD95, BALP06, KOE⁺06, SS96]. **reduced** [SG04]. **Reducible** [Hav97, JC97]. **Reduction** [Bee94, Bur84, FRW90, Geo84, KLS92, Mul92, NN86, CSV01]. **Redundancies** [DS88, Sor89]. **redundancy** [KCL⁺99]. **Redundant** [Coh83, Coh85]. **Reentrant** [Bob80]. **Reexamination** [CG95]. **Refactoring** [Ste18, TFK⁺11]. **Reference** [Bob80, Pea21, Wis79, KSK07, KOE⁺06, LP06, MDJ05]. **reference-counting** [LP06]. **References** [Han92, TGT18, TGT20, SV96]. **Referencing** [LS81]. **Referential** [QG95]. **Refinement** [BBF⁺11, BKL⁺97, BCEM15, CM86a, DGL⁺79, GEGP17, JLP⁺14, MRG88, SL92, AG04, QG95]. **reflecting** [HS11]. **reflection** [SW97a]. **Regeneration** [SR21]. **Region** [TB98, SYN06]. **region-based** [SYN06]. **regions** [RR05]. **Register** [BCT94, CH90, GS094, JLF02, LCBS19, RDG08, SH89, GA96, HCS10, LGAT00, PM04, PS99, PF96, TP04]. **registers** [ZP07]. **Regular** [CC97, HVP05, KBP22, LaL81]. **relating** [ABC⁺21]. **Relation** [LBN17, MTG80]. **Relational** [BNNN22, BKOZB13, CB80, GS98, TLHL11, JJD98, JLRS10]. **Relations** [ELS⁺14, HT86, LH08]. **Relationship** [BS88]. **Reliability** [LM18, WN08]. **Reliably** [TCP⁺17]. **Rely** [GEGP17, LFF14, SZLY21]. **Rely-Guarantee** [GEGP17, SZLY21]. **Rely-Guarantee-Based** [LFF14]. **Remembrances** [PM09]. **Remote** [BCP08, SG90]. **Removal** [AK82]. **Rendezvous** [Cha87]. **Renvoise** [Dha91, DS88, Sor89]. **Reoptimization** [PS92]. **reordering** [YUW02]. **Repair** [BN99, MF88, MYD95, KC01]. **Repairing** [CPRT02]. **Replacement** [MM89]. **Replicate** [RB94]. **replication** [RD03]. **Reply** [Bur91, Fra81, LaL83, Tan83, Wir91, SM82]. **Representation** [DGL⁺79, Mul92, SM89,

Wad90, Wan82, Mil85].
Representation-Independent [Mul92].
Representations [Lam87, RF97, Wal80, Wal81, BGP99].
Reproduction [BHM⁺19]. **Repulsing** [TOUH21]. **reshaping** [ZCG⁺07]. **Resilient** [GHH⁺19, WL85]. **Resolution** [ABR81, Bak82]. **Resolved** [SIG17].
Resource [CS95, Cla80, IK05, MQ05, BDFZ09, CEI⁺07, HR02, HAH12].
Resources [And81, FLBB89]. **Respect** [Gaz83]. **Response** [Tic88]. **Responsibility** [DC22]. **Responsiveness** [HU96]. **Restores** [Wis79]. **Result** [TB95]. **Results** [Ven95, BGP99, SYH07]. **Retargetable** [DF80, DF81, MV87]. **Retention** [LS81].
Rethinking [LHR19]. **retrofitting** [NCH⁺05]. **Return** [SDB20]. **reuse** [DNS⁺06, GW99, ZSD09]. **Reversal** [ACS84]. **Reverse** [PS08]. **Reverse-mode** [PS08]. **Revised** [SIG17]. **Revision** [FM87b]. **revisited** [MDJ05, Zho96].
Revisiting [DI09, ZZO22]. **Rewrite** [FKW98, Ass00]. **Rewriting** [KKSD94, BCM99, DDD05, FKW00, GRSK⁺11, MMM⁺07]. **Right** [KS83, LaL81, SJ06]. **Rigorous** [SBB⁺19].
Rings [BP89, Hua93]. **RISC** [PS93].
Rivieres [Hen83]. **RMI** [MVV⁺01].
Robust [LS83]. **Robustly** [PG21]. **Roever** [Moi83]. **role** [Apt00]. **Roman** [PB97].
Round [SBB⁺19]. **Round-Off** [SBB⁺19].
Rounding [FL15]. **Row** [MM89]. **RSMs** [CGG⁺19]. **rule** [HQRT02]. **Rules** [GL80, JTM98, SS84, LS09, SSD09]. **Run** [ISY88, TZ07, GMP⁺00]. **Run-Time** [ISY88, TZ07, GMP⁺00]. **Runtime** [Ano18, BLH12, BEF⁺16, FNBG20, GSS⁺18, ISIRS22, TCVB14, BH05a, TSY00]. **Rust** [MTK21, Pea21]. **RustHorn** [MTK21].
S [HCW82]. **S/SL** [HCW82]. **Safe** [AWW95, Dug02, JW17, LMM21, PG21, SDB20, AFF06, BSvGF03, LS03, Loc13, NCH⁺05, SA00, ZCG⁺07, MH06, SHB⁺07].
Safe-by-default [LMM21]. **safe-for-space** [SA00]. **Safer** [COE⁺20]. **safety** [FF08, YS10]. **same** [SS05a]. **sampling** [PPT08]. **Santa** [WP10]. **Sapphire** [URJ18]. **Sather** [MOSS96]. **Satin** [VWJB10]. **satisfaction** [DF11].
Satisfiability [FSH23, XA07]. **satisfying** [Van96a, Van96b]. **Saturn** [XA07].
Scalability [TCP⁺17]. **Scalable** [FT94, GKM20, ZSS20, XA07].
ScalaExtrap [WM12]. **scale** [ZSS20].
Scaling [TCP⁺17]. **scan** [PS99]. **Scanners** [HKR92]. **Scanning** [GVC15]. **Scavengers** [UJ92]. **Schanuel** [KPS92]. **schedulability** [GH97]. **schedule** [TVA07]. **Scheduler** [TCVB14]. **schedules** [MH04]. **Scheduling** [BG89b, FGL94, KR79, KPF95, LPP01, LJ99, LCBS19, NB99, NSTD⁺15, PS93, TCVB14, Ban11, ME97, YF98]. **schema** [RLS⁺01]. **Scheme** [Mur91, YR94, IV06, WC97]. **Schemes** [Son87, TM93]. **Schorr** [BP82]. **Schwanke** [Tic88]. **Scientific** [How80]. **Scope** [App94b]. **Scratchpad** [SRM10]. **Screen** [MM89]. **SDF** [VHKO02]. **Search** [Dar90, BH99, SS05a]. **Searching** [CC97].
Section [Mül21, Wol92]. **Secure** [ABC⁺21, BCEM15, PAS⁺15, PG21, BBF⁺11, HY07].
Securely [RB94]. **Securing** [BNV⁺21].
Security [TGT18, TGT20, BFGT08, BFG08]. **see** [BR10]. **Selection** [DF84, SSS81]. **Selective** [LTMS20, Min84, OLH⁺16, ME97]. **Self** [BP89, DHS09, Gho93, Gom92, ABB⁺09]. **self-adjusting** [ABB⁺09]. **Self-applicable** [Gom92]. **Self-Stabilization** [Gho93, DHS09]. **Self-Stabilizing** [BP89].
Semantic [AAR⁺10, AWW95, GGL15, LCK⁺22, ML21, MH06, HCW82].
Semantics [ABHI11, Ans87, AB94, AW82, BGL93, Ber94, BLRS12, Bou88, Boy10, CPS93, CD79, FA93, GM81, Gud92, Han94, JPP91, Kai89,

Mul92, NF89, Set83, Sou84, WM95, Wan82, dBB85, ACE96, BMR01, Bou06, GZ04, MF09, PCJD08, SWU10, SJ03, Tar07, WKD04].

Semantics-Based [BGL93, CPS93, PCJD08].

Semantics-Directed [Han94, Set83].

Semaphore [CR87]. **Semiring** [BMR01].

Semiring-based [BMR01]. **Send** [Gor04].

Send-receive [Gor04]. **Sensitive** [OLH⁺16, HBS22, PKH07, Ram00, Rep00, RRSY08].

Sensitivity [FL15, KRR18, LTMS20].

Separating [DDM11, Ste22]. **Separation** [BDJ13, DJP⁺16, OYR09, BBTS07, PZ22].

Separators [GSO94]. **Sequences** [GSW95, LWR21]. **Sequent** [ABS09, Miq19].

Sequential [AFdR80, Ber80, Gor21, GLR83, HM84, KS79, MC82b, Moi83, Sou84].

Sequentialization [ITF⁺22]. **Series** [Wat91]. **Served** [LH91]. **server** [LDM07].

servers [BBYG⁺05]. **service** [CMS03].

Services [CHY12, RB94, BFG08, CGP09].

Session [DDMP22, KBP22, Pad19, TY18].

Session-Based [TY18]. **Sessions** [TY21].

Set [Sha82, FF99]. **set-based** [FF99].

SETL [DGL⁺79, FSS83, SSS81]. **Sets** [DP82, DPPR00]. **Setting** [Lin79, Nie85, HL05]. **SHA** [App15].

SHA-256 [App15]. **shape** [GCRN11, JLRS10, JB06, SRW98, SRW02].

shape-analysis [SRW98]. **shaping** [HS11].

Share [SS88]. **Shared** [Cha93, FLBB89, KH92, KRS88, LB22, Pet83b, Dug02, HBJ98, TSY00, BC91].

Shared-Memory [Cha93, TSY00]. **Sharing** [CSS99, Lam87]. **SHErrLoc** [ZMVPJ17].

Shift [BN99, MYD95]. **Shift-Reduce** [BN99, MYD95]. **Short** [Sag86]. **Should** [LP99]. **Side** [Boe85, KWL09, RLS⁺01, TA08b].

side-effect [RLS⁺01]. **sign** [KKN06]. **signal** [BH05b]. **Signatures** [BR97]. **Signedness** [GNS⁺15]. **similar** [AE98]. **Simple** [Boe85, GLO88, JP17, LM22, SH89].

simpler [BKRW98, BKRW05].

Simplification [LZR22, NO79]. **Simula** [Lan80]. **Simulating** [KKSD94].

Simulation [AMT14, Bar81, Bor81, LFF14, HQRT02].

sin} [Lam90]. **Single** [BM94, CFR⁺91, JBK18, GPF08].

Single-Assignment [BM94]. **Single-Pass** [BM94]. **Single-Threaded** [JBK18]. **Sit** [AKNP17]. **situations** [WN08]. **Size** [BA08, BEF⁺16, JB20, Lee09, LDK⁺96].

Size-change [BA08, Lee09]. **Sized** [DG19].

Sketches [HSD22]. **Slicing** [AB20, AHJR14, CF94, DL18, GH97, HRB90, ML21, Mye18, Ven95, WZ07, BHK07, GZ07, NR06, RAB⁺07, WR08, ZGZ05]. **SLR** [BS88, Tai79]. **Small** [BNV⁺21, FLBB89, LH91, Pet83b].

Smart [Tic86]. **Smarter** [SK88, Tic88]. **Smooth** [CEG23, JF81]. **Soft** [WC97]. **Software** [ACM11, AW85, Ber94, DAW88, HSS⁺14, How80, JW17, PXL95, PPS79, Pur94, Wal92, YBL16, CTT07, HN05, LS98, ME97, NCH⁺05, RDG08, SHB⁺07, SRM10].

Software-Defined [Wal92]. **Soininen** [LaL84]. **Soisalon** [LaL84].

Soisalon-Soininen [LaL84]. **Solution** [ADG⁺94, DS88, Gho93, Pet83b, Sor89, WP10]. **Solving** [GS11, HLH19, HSD22, NSTD⁺15, SRW98].

Some [AB94, AK82, Sha82, Sor89].

Sometimes [Gri79]. **Sound** [LLK⁺17, LCK⁺22, RSPS23]. **Soundness** [Sok87]. **source** [HBG⁺09]. **Space** [BP12, BB79, FLBB89, JP81, NB99, RD87, YF98, LS09, SS05a, SA00]. **Space-Efficient** [JP81, NB99]. **Space/time** [YF98].

Space/time-efficient [YF98]. **spaces** [JLF02]. **Span** [LS80, Rob79].

Span-Dependent [LS80, Rob79].

Spanning [GHS83]. **Sparse** [OHL⁺14].

Spatial [NSTD⁺15]. **Special** [Ahm20, Mül21, Wol92, Yos22, Sag07].

Specialization [AHJR14, BCP08, GJ05, HT04, SLC03].

specialization-point [GJ05]. **Specializing** [BCD90]. **Specific** [ASAVF19, Gie83, Tra08]. **Specification** [BCM99, CDFP89, EO80, Fea87, GMH81, Jon94, Kam83, LN15, Lin93, LJ99, Loe87, Mal82, Mor88, PPS79, RY88, TWW82, LP99, LPSO04]. **Specificational** [MB99]. **Specifications** [AL93, AL95, BNN18, CES86, DB85, Gaz83, Loe87, MW84, MB83, Rei83, Sch85, Win87, Zav85, Žic94, vPS81, JJD98, YS97]. **Specifying** [GM81, Lam83, RF97]. **Speculation** [YBL16, GB99]. **speculative** [KOE⁺06]. **SPL** [HSG17]. **Split** [Com80]. **splitting** [JC97, UM02, WJ98]. **SPMD** [WM12]. **Squeezers** [ISIRS22]. **SR** [AOC⁺88]. **SSA** [BDP14, GSW95, KCL⁺99]. **SSA-Based** [BDP14]. **Stabilization** [Gho93, DHS09]. **Stabilizing** [BP89]. **Stack** [CGS⁺03, FG03, LaL81, SDB20, CF04, Zho96]. **Stack-Controlling** [LaL81]. **Standard** [Fat82, HM93, Qia00, Blu99]. **State** [ACW90, BLH12, CES86, GC86, PP91, Pur91, Zav85, AY01, ABE⁺05, MBT09]. **Statement** [Ell82, Mor88, SM81]. **Statement-Oriented** [Ell82, SM81]. **Statements** [CF94]. **States** [ADGM91, CBMO19]. **Static** [AKNP17, AC94, BM94, CGJ⁺97a, CF94, CFR⁺91, DL18, Deb89, HOYY18, LLK⁺17, LST98, MRGP20, MOS07a, Mye18, PW94, SBE⁺19, YS99, ZMVPJ17, CEI⁺07, GPF08, GZ04, HO07, PSS05, PFH11, RSL10, VJB12, WCM00, YF09, AFF06, FFLQ08]. **Statically** [ACPP91]. **Statistical** [LLK⁺17]. **Statistics** [Lan80]. **Staveren** [Pem83]. **Steensgaard** [Ell82, SM82]. **Steensgaard-Madsen** [Ell82, SM82]. **stencil** [LS04]. **Step** [Col84, TVA07]. **Steps** [Jon83]. **Stepwise** [CM86a, SL92]. **Stevenson** [Pem83]. **Storage** [BBC16, Bre89, JP81, LDK⁺96, Mur91, Rob79, Sip82, KOE⁺06, TVA07]. **Strategies** [Bir84, Bir85, Geo84, NN86]. **Strategy** [Bre89, PK80, WSH15, ZSS20, GS11]. **Stratified** [SS98]. **Stream** [HSG17]. **streams** [CFP⁺04]. **strength** [CSV01]. **Strict** [Bee94]. **Strictness** [Bee94, SR95]. **String** [GH80]. **Strings** [AS80, KS88, KS89, ADR06, KK07]. **Strong** [KZC15, PZ22]. **Strong-separation** [PZ22]. **Structural** [SZBH86, MTSS09]. **Structurally** [HS11]. **Structure** [BC79, GKL94, HM93, Mis94, MWB94, She91, HY07]. **Structure-Oriented** [GKL94]. **Structured** [BM94, CHY12, GD82, Har80, LS81, Mur91, RR03]. **Structures** [ANP89, Bob80, FL81, GEGP17, RCRH95, SSS81, LPSO04, RAB⁺07]. **Study** [BHM⁺19, FTJ95, BHK07, BdIBH99, DF98, KF03, LS98]. **Style** [BDM15, LR19]. **Sublanguage** [DGL⁺79]. **Sublinear** [RD87]. **Sublinear-Space** [RD87]. **Submodule** [MB83]. **Subroutines** [SA99]. **subscribe** [Eug07]. **Subscript** [CG95]. **Subsequence** [Han92]. **Subset** [BL87]. **Substrings** [BL94b, Han92]. **subtype** [Duc08, KR01]. **Subtypes** [Vol91, Bur91]. **Subtyping** [AC96, AC93, GGL15, LN15, LR19, LBN17, LW94, XBOS20, ZZO22, GZ05, IV06]. **Subtyping-Relation** [LBN17]. **SUIF** [HAM⁺05]. **Supercompiler** [Tur86]. **Superimposition** [Kat93]. **Supermartingales** [TOUH21]. **Support** [Bal94, DS90, Fea87, LS83, MK94, Wei90, TSY00]. **Supporting** [RCRH95]. **Supports** [ABPS98]. **Suppression** [DS88, FGL94, Sor89, JNGG10]. **Survey** [Apt81, GPA⁺01]. **Suspension** [CFM94]. **Symbol** [ABR81, Rei83]. **Symbolic** [Dil90, HP96, Hal85, Hen82, NcS20, RR05, SBB⁺19, YMW97, BGP99, MPM03, CM93, WST85]. **Symmetric** [FY85]. **Symmetry** [ES97, SG04]. **Synchronisation** [CHMY19]. **Synchronization** [Bag89, DJP⁺16, Her91, KRS88, RS84b, Sch82, CGS⁺03, DHM⁺12, Ram00, RD03].

synchronization-sensitive [Ram00].
Synchronizing [And81]. **Synchronous** [CS87, TLHL11]. **synchrony** [CS04].
Syntactic [BF87, GMZ00, MF88, PK80, Wil82b].
Syntax [DMM88, Ode93, Ric85, SSS83, BMR01, CPRT02, Jef03, HCW82].
Syntax-Directed [DMM88].
Syntax-Error-Handling [SSS83].
Syntax/Semantic [HCW82]. **Synthesis** [AE98, AE01, AAE04, Ban87, BDJ13, BKL⁺97, Cla80, DKKL18, HLH⁺23, MW80, MW84, MV87, SBS22]. **System** [AFdR80, AW85, BS86, Bou88, CB80, Fea82, GD82, GP81, Han81b, HM84, JMSY92, LR13, ML80, Moi83, MH86, PO95, RD13, SA99, WC97, BH05a, FH04, FM99, HO07, JB06, KS10, MTSS09, NP08, PE08, STSP05, MWCG99]. **Systematic** [DC22, DF98, PSS05]. **Systems** [ABLP93, Ano18, AR84, ACS84, BKS88, BG89a, BDP93, CI84, CDFP89, CBDGF95, CIJGP18, CES86, CPS93, CBMO19, DL18, DAW88, Fea87, FKW98, Gor21, Hen86, HLH⁺23, Jag94, Jon94, JTM98, Kar84, Kat93, Kau84, Lam84, LW93, Mis86, Mye18, SZLY21, TGT20, WGS92, WGS93, WCW90, van88, Ass00, AE98, BCP08, BCM99, BGP99, CSCM00, DGG97, GS11, TP04, TZ07, YMW97, WCW91]. **Systolic** [Hen86].
T [Žic94]. **Table** [BMW91, PK80, DAS98].
Table-Drive [PK80]. **Tabled** [SS98].
Tables [ADGM91, DDH84]. **TaDA** [DSFG21]. **Tail** [DP97, CF04]. **Tail-Call** [DP97]. **tail-recursive** [CF04]. **Tailored** [Kau84]. **Tailored-List** [Kau84]. **Tale** [TY21]. **Tanenbaum** [Pem83, Tan83].
Target [Wan82]. **Task** [GP95, NSZS13, RRB19, HBJ98]. **task-** [HBJ98]. **Task-Level** [GP95].
Task-Parallel [NSZS13]. **Tasking** [Dil90].
Tasks [GP81]. **Taylor** [SBB⁺19]. **tcc** [PHEK99]. **Technical** [BS88, Bur90b, Bur91, Coh91, CM93, DS88, Ell82, FA93, Fra81, Hen83, LaL83, LaL84, Moh81, Moi83, MS88, NN86, Par90, Pem83, Sor89, SM82, Tan83, Tic88, Vol91, WST85, Wir91, YB88, MMG00]. **Technique** [AWW95, BN99, BCD⁺15, JSB⁺12, KKM90, SSS81, SSS83, JNGG10, KBC⁺99, RD97, SYN06]. **Techniques** [AK82, CMN91, DP99, GLR83, How80, TWW82, WCW90, WCW91, BHK07, DDD05, DEMD00, LS98, MSRR00, SS96, TSL⁺02]. **technology** [LS98].
Temporal [AS89, CBDGF95, CES86, Kar84, Lam94, MW84, GS99, KWL09].
temporal-ordering [GS99]. **temporaries** [RMH06]. **Ten** [Apt81]. **Tensor** [RTP17, SBS22]. **Tentative** [Jon83].
Tenuring [UJ92]. **Term** [KKSD94, MBT09, GRSK⁺11].
Termination [AF84, Apt86, BAGM12, BCG⁺07, CFNH18, CDK⁺18, DSFG21, DG19, Fra80b, GJ05, HSP83, JBK18, MC82b, TM93, BAL07, BA08, DDV99, GRSK⁺11, Lee09, PR07, SMP10, Fra80a, Moh81]. **Test** [Wey83, WW95, Duc08]. **Testing** [AMT14, GMH81, TK94]. **Tests** [Coh91, Koz97, Wir91, GZ05]. **Text** [CC97].
TF [SBS22]. **TF-Coder** [SBS22]. **Their** [Kam83, LaL84, SS82, PS96]. **Theoretic** [ES97, Sha82, KV00]. **Theoretical** [KRR18].
Theories [NSTD⁺15, Bou06]. **Theory** [AB20, CZ84, FSH23, KD94, KRS94, NBG13, Ryu16, TLHL11, CGP09, MH06, Oho07, Pau01, SS05b, Bla03, FG03].
ThingLab [Bor81]. **things** [PM09].
Thinking [WLBf16]. **Thinning** [Web95].
Third [Wol92]. **ThisType** [Ryu16].
Thread [YBL16]. **Thread-Level** [YBL16].
Threaded [JBK18, ITF⁺22, TSY00]. **Three** [DPP22, Oss83]. **Tichy** [Tic88]. **Tile** [JB20].
tiling [JLF02, LS04, RKSr12]. **Time** [AL94, ABR81, BL94b, BLH12, Coh91, DLR16, HBS22, Hol87, ISY88, Jef85, Lam84, MMG92, PS93, RS84a, RS84b, TN19, Wir91,

YR94, Žic94, BAL07, BALP06, BKRW98, BKRW05, DDD05, GH97, GMP⁺00, GB99, GW99, HK07, LS98, LPP01, LS09, Mil85, Ram99, Rep98, SYK⁺05, Tra08, TZ07, Wu04, YMW97, LW93].
Time-Constrained [Žic94, LPP01].
Time-Critical [PS93]. **time-efficient** [GB99, YF98]. **Time-sensitive** [HBS22].
Timed [Žic94]. **Timeout** [Lam84]. **Timing** [LJ99]. **tokenization** [Rep98]. **Tolerance** [LJ99]. **Tolerant** [CS95, Lam84, AAE04].
Tool [CPS93]. **Toolkit** [BDFH97]. **toolkits** [VHM⁺01]. **Tools** [van88]. **Top** [SZLY21].
Top-down [SZLY21]. **TOPLAS** [Ano18, TGT20, MP10a, MP10b]. **topology** [DDM11]. **Tortoise** [Dan23]. **Total** [San96].
Trace [ABC⁺21, FGL94, WGS92, Ban11, RM07, SJ03, WGS93, WM12]. **Trace-Based** [WGS92, WGS93, WM12]. **Trace-relating** [ABC⁺21]. **traces** [HBM⁺06, WR08].
Tracing [BL94a, DLR16, MMM⁺07].
tradeoffs [ZGZ05]. **Trailing** [VR95]. **Traits** [DNS⁺06]. **Transactional** [URJ18, ABHI11, CFP⁺04]. **Transactions** [Ano18, HKMN94, TGT20]. **Transducer** [DVLM15]. **Transducer-Based** [DVLM15].
Transformation [BKB80, Fea82, FL91, NSZS13, Wat91, RKRR04, San96, TSY00, WZ07].
Transformational [BDFH97, Bir84, Bir85, DSW82, OA88, RC03]. **Transformations** [Bar85, EGM01, Geo84, LdR81, LFF14, MS83, MCT96, Nie85, FGM⁺07a, KWL09, MOS07a, VALG05, WS97, Hen83, NN86].
Transformers [Lam90, MMS96, MBT09].
TransformGen [GKL94]. **Transforming** [AWW95, BE94]. **Transition** [PR07].
Translation [AK87, BK11, Kat84, Son87, AAD⁺07, BGKR09, DP99, RC03].
Transmission [HL82]. **Transparently** [JSB⁺12]. **Transport** [Min84]. **transpose** [CRN⁺08]. **Traversals** [LPSO04].
Treatment [YB87, YB88]. **Tree** [AGT89, BOV85, BMW91, DVLM15, DS83, Han81a, Hen83, LdR81, FGM⁺07a]. **Trees** [Com80, GHS83, MTG80, Sip82, Wad90, ACM11, SGL97]. **Treewidth** [CIJGP18, CGG⁺19]. **trick** [DMP96].
Truth [BDH⁺16]. **TSL** [LR13]. **TSO** [FSH23]. **tuning** [GMM99, PE08]. **Tuples** [Rem81]. **Tutorial** [GM81]. **Two** [BO94, CDFP89, DPP22, GPWZ08, TY21, FMoPS11]. **Two-dimensional** [GPWZ08]. **two-variable** [FMoPS11]. **Type** [Bur90b, Car95, CEW14, Coh91, CZ84, Dug02, Eug07, HHPW96, HM93, Hen93, KPS92, KTU93, KR01, Lan80, LO94, LST02, LY98, LP00, MRGP20, MP88, NBG13, Pad19, PO95, SA99, SM89, Ste22, TWW82, TGT18, TGT20, Van06, VMLY22, Wal80, WT11, Wir88, WC97, BSvGF03, BCG⁺07, FJKA06, FGM07b, FM99, FF08, GZ07, GMZ00, HO07, HDH02, HY07, KF10, KS10, NP08, NCH⁺05, PT00, STSP05, TFK⁺11, TZ07, Wal81, Wir91]. **Type-based** [Eug07, LP00, BCG⁺07]. **Type-Driven** [TGT18, TGT20]. **Type-Extension** [Coh91, Wir91]. **Type-Graphs** [KPS92]. **Type-preserving** [LST02]. **Type-Safe** [Dug02, BSvGF03, NCH⁺05].
Typechecking [CL95, MBC04]. **Typed** [ACPP91, Geo84, GDF23, Kob98, NN86, WCM00, AAR⁺10, LP99, MWCG99].
Typed-Untyped [GDF23]. **Types** [AFF06, AC93, BG22, BB94, BCEM15, DDMP22, DPP22, DD85, EO80, FFLQ08, GEGP17, HL82, Hes88, Jen97, Kam83, KBP22, LaL89, LO94, LBN17, Loe87, Mal82, Miq19, MP88, WL85, Wei89, Wei90, AM01, BBF⁺11, Dam03, DDM11, DMM01, Gro06, GPV07, HVP05, IV06, MME⁺10, PS96, Pal98, STS03, SP07]. **Typestate** [COE⁺20, GTWA14]. **Typestate-Oriented** [GTWA14]. **Typing** [ACPP91, DG19, Dug99, GGSV22, RM10, SV96].
ultimate [PS08]. **Ultracomputers** [Sch80]. **Unassigned** [Win84]. **Unbounded**

[LWR21, BGP99]. **uncaught** [LP00]. **Undecidability** [Ram94, Rep00, Cha02]. **undecidable** [Ram00]. **Understandable** [MSM⁺16]. **Understanding** [ST00a]. **Undo** [Lee86]. **unfold** [RKRR04]. **unfold/fold** [RKRR04]. **Unidirectional** [Pet82]. **Unification** [MM82, DRSS96]. **Unified** [VSS94]. **Uniform** [AS80, BP89, Hua93, AH10, HY07]. **Uniformly** [DB85]. **unifying** [TVA07]. **unique** [Van06]. **UNITY** [Pau01, TB95]. **Universal** [DPP22]. **universe** [DDM11]. **Unnecessary** [BT93]. **Untrusted** [JW17]. **Untyped** [GDF23]. **Update** [Hud91, FGM⁺07a, GW99]. **Updating** [HSS⁺14, HN05, SRW98, SHB⁺07]. **Upper** [PW94]. **Usage** [MS83, BDFZ09, IK05, QR00]. **Use** [FOW87, GH80, HS94, LaL84, PPS79, She91, SS82, CC97]. **usefulness** [HDH02]. **User** [ACS84, DS90, Mye90, Wal80, Wal81, Wat83, van88]. **User-Defined** [Wal80, Wal81]. **Using** [AGT89, Bob80, CGJ⁺97a, CES86, CH87, DP93, Di190, DMM01, DJP⁺16, FLBB89, GSW95, GSO94, HRB90, ISIRS22, JTM98, Kar84, LaL89, Lam84, LM18, LWR21, Mye90, Ode93, Pet83b, PP94, PBR⁺15, SS84, SS96, Sok87, SGL98, TvS82, ACM11, BH99, CSW06, CGS⁺03, DR05, GS99, GCRN11, KWL09, KSK07, MTSS09, RD03, SZLY21, ST00a, SGL96, TFK⁺11, VJB12, XA07, YUW02, ZSD09, Pem83]. **Utilizing** [ES97].

VAL [McG82, Wet82]. **Validation** [How80, KC01, MOS07a]. **Value** [HL82, dBH21, HL05, SW97a]. **valued** [RMH06, SRW02]. **Values** [DD85, Han92, HSD22, Wet82]. **Variable** [MS83, MTG80, FMoPS11, GLMM05]. **Variables** [GSW95, JPP91, Lam88, LH91, Pet83b, Rem81, Sch85, BGP99, HVB⁺99, NS13, SV96]. **Variant** [IV06]. **variants** [FG03]. **Variational** [CEW14]. **Variety** [NcS20]. **Vector** [AK87, Bud84, CBMO19, Fis80, FTJ95, KD94, Per79, KK07]. **Verifiable** [YB85]. **Verification** [App15, BDP14, BCD⁺15, CDFP89, CES86, CPS93, CHMY19, Di190, EGP14, GL94, ITF⁺22, JBK18, Jon94, JTM98, KKW14, LFF14, LJ99, LCK⁺22, LS79, MTK21, NBG13, RY88, SZLY21, BDL⁺08, CEI⁺07, GPF08, GM12, Qia00]. **Verified** [BFGT08, BKL⁺97, HL22, JLP⁺14, DSW11]. **Verifying** [AS89, BFG08, CGJ97b, DJP⁺16, GEGP17, LM18, YS10, Mon08]. **Version** [YR94]. **Versions** [HPR89]. **Versus** [DPP22, Pal98, Pip97, UM02]. **Vertices** [BGH⁺13]. **Very** [GLR83]. **VHDL** [BKL⁺97]. **via** [CEI⁺07, FKW98, GPF08, GSO94, HLH19, HOYY18, ITF⁺22, MMM⁺07, PE08, RTP17, SRW02, SV20, Tra08, WCM00]. **View** [KBP22, SZBH86, FGM⁺07a]. **view-update** [FGM⁺07a]. **Virtual** [Jef85, RRB19, CEG07, KN06]. **Visibly** [CBMO19]. **Visual** [Mye90, BCM99]. **vita** [MP10a, MP10b]. **VLSI** [LVV⁺83]. **Volpano** [Bur91]. **Volume** [Ano18, TGT20]. **vs** [HR02].

W [Tic88]. **Wait** [Her91]. **Wait-Free** [Her91]. **Waite** [BP82]. **Warp** [LW93]. **way** [VHM⁺01]. **Weak** [AMT14, KZC15]. **weakening** [SYYH07]. **Weaker** [Boo82]. **web** [BFG08, BLRS12, CHY12, CGP09, CMS03]. **Weight** [GHS83]. **While** [Pet83a, BC85b, GM81]. **while-Programs** [BC85b]. **Whole** [BDH⁺16]. **Widening** [KKW14, VJB12]. **win**} [Lam90]. **Within** [FKW98]. **Without** [Cop94, Ode93, AS89, Cas95, Sto04, VR95]. **Witnessing** [TA08b]. **Workbench** [CPS93]. **World** [GG85, DF11]. **World-Model-Based** [GG85]. **Worst** [CFG19, WW95]. **Worst-Case** [CFG19]. **wp** [BH99]. **write** [AE01]. **Writing**

[Pet83a, Win87]. **WYSINWYX** [BR10].

X [OLH⁺16, MSM⁺16]. **X-Sensitive** [OLH⁺16]. **X10** [GHH⁺19]. **XARK** [ATD08]. **XML** [HVP05, HFC09]. **XSL** [MOS07a].

Years [Apt81].

ZGC [YW22]. **Zones** [GMN⁺21].

References

- Ancona:2007:PCT**
- [AAD⁺07] D. Ancona, C. Anderson, F. Damiani, S. Drossopoulou, P. Giannini, and E. Zucca. A provenly correct translation of Fickle into Java. *ACM Transactions on Programming Languages and Systems*, 29(2):13:1–13:67, April 2007. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- Attie:2004:SFT**
- [AAE04] Paul C. Attie, Anish Arora, and E. Allen Emerson. Synthesis of fault-tolerant concurrent programs. *ACM Transactions on Programming Languages and Systems*, 26(1):125–185, January 2004. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- Ahmed:2010:SFT**
- [AAR⁺10] Amal Ahmed, Andrew W. Appel, Christopher D. Richards, Kedar N. Swadi, Gang Tan, and Daniel C. Wang. Semantic foundations for typed assembly languages. *ACM Transactions on Programming Languages and Systems*, 32(3):7:1–7:67, March 2010. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- Anderson:1981:LLC**
- [AB81] S. O. Anderson and R. C. Backhouse. Locally least-cost error recovery in Early’s algorithm. *ACM Transactions on Programming Languages and Systems*, 3(3):318–347, July 1981. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- Arbab:1994:SCD**
- [AB94] Bijan Arbab and Daniel Berry. Some comments on “A denotational semantics for Prolog”. *ACM Transactions on Programming Languages and Systems*, 16(3):605–606, May 1994. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/177605.html>.
- Amtoft:2020:TSI**
- [AB20] Torben Amtoft and Anindya Banerjee. A theory of slicing for imperative probabilistic programs. *ACM Transactions on Programming Languages and Systems*, 42(2):6:1–6:71, May 2020. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <https://dl.acm.org/doi/abs/10.1145/3372895>.

- Acar:2009:EAS**
- [ABB⁺09] Umut A. Acar, Guy E. Blelloch, Matthias Blume, Robert Harper, and Kanat Tangwongsan. An experimental analysis of self-adjusting computation. *ACM Transactions on Programming Languages and Systems*, 32(1):3:1–3:53, October 2009. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- Abate:2021:EAT**
- [ABC⁺21] Carmine Abate, Roberto Blanco, Stefan Ciobâca, Adrien Durier, Deepak Garg, Catalin Hrittcu, Marco Patrignani, Éric Tanter, and Jérémy Thibault. An extended account of trace-relating compiler correctness and secure compilation. *ACM Transactions on Programming Languages and Systems*, 43(4):14:1–14:48, December 2021. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <https://dl.acm.org/doi/10.1145/3460860>.
- Alur:2005:ARS**
- [ABE⁺05] Rajeev Alur, Michael Benedikt, Kousha Etessami, Patrice Godefroid, Thomas Reps, and Mihalis Yannakakis. Analysis of recursive state machines. *ACM Transactions on Programming Languages and Systems*, 27(4):786–818, July 2005. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- Acar:2006:AFP**
- [ABH06] Umut A. Acar, Guy E. Blelloch, and Robert Harper. Adaptive functional programming. *ACM Transactions on Programming Languages and Systems*, 28(6):990–1034, November 2006. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- Abadi:2011:STM**
- [ABHI11] Martín Abadi, Andrew Birrell, Tim Harris, and Michael Isard. Semantics of transactional memory and automatic mutual exclusion. *ACM Transactions on Programming Languages and Systems*, 33(1):2:1–2:50, January 2011. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- Amadio:2003:RDC**
- [ABL03] Roberto M. Amadio, Gérard Boudol, and Cédric Lhousseine. The receptive distributed π -calculus. *ACM Transactions on Programming Languages and Systems*, 25(5):549–577, September 2003. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- Abadi:1993:CAC**
- [ABLP93] Martín Abadi, Michael Burrows, Butler Lampson, and Gordon Plotkin. A calculus for access control in distributed systems. *ACM Transactions on Programming Languages and Systems*, 15(4):706–734, September 1993. CODEN ATPSDT. ISSN 0164-0925

- (print), 1558-4593 (electronic).
 URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/155225.html>. [ABS09]
- [ABM93] Yehuda Afek, Geoffrey Brown, and Michael Merritt. Lazy caching. *ACM Transactions on Programming Languages and Systems*, 15(1):182–205, January 1993. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). [AC93]
 URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/151651.html>.
Afek:1993:LC
- [ABPS98] Krzysztof R. Apt, Jacob Brunekreef, Vincent Partington, and Andrea Schaerf. Alma-O: An imperative language that supports declarative programming. *ACM Transactions on Programming Languages and Systems*, 20(5):1014–1066, September 1998. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). [AC94]
 URL <http://www.acm.org:80/pubs/citations/journals/toplas/1998-20-5/p1014-apt/>.
Apt:1998:AIL
- [ABR81] F. André, J. P. Banatre, and J. P. Routeau. A multiprocessing approach to compile-time symbol resolution. *ACM Transactions on Programming Languages and Systems*, 3(1):11–23, January 1981. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). [AC96]
Andre:1981:MAC
- Zena M. Ariola, Aaron Bohannon, and Amr Sabry. Sequent calculi and abstract machines. *ACM Transactions on Programming Languages and Systems*, 31(4):13:1–13:48, May 2009. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
Ariola:2009:SCA
- Roberto M. Amadio and Luca Cardelli. Subtyping recursive types. *ACM Transactions on Programming Languages and Systems*, 15(4):575–631, September 1993. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). [AC93]
 URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/155231.html>.
Amadio:1993:SRT
- J. Michael Ashley and Charles Consel. Fixpoint computation for polyvariant static analyses of higher-order applicative programs. *ACM Transactions on Programming Languages and Systems*, 16(5):1431–1448, September 1994. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). [AC94]
 URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/186037.html>.
Ashley:1994:FCP
- Martín Abadi and Luca Cardelli. On subtyping and matching. *ACM Transactions on Programming Languages and Systems*, 18(6):1043–1070, November 1996. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). [AC96]
Abadi:1996:SM

- 18(4):401–423, July 1996. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/toplas/233563.html>.
- [ACE96] Isabelle Attali, Denis Caromel, and Sidi Ould Ehmety. A natural semantics for Eiffel dynamic binding. *ACM Transactions on Programming Languages and Systems*, 18(6):711–729, November 1996. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/toplas/235830.html>; <http://www.acm.org/pubs/toc/Abstracts/toplas/236118.html>.
- [ACM11] Rajeev Alur, Swarat Chaudhuri, and P. Madhusudan. Software model checking using languages of nested trees. *ACM Transactions on Programming Languages and Systems*, 33(5):15:1–15:45, November 2011. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [ACPP91] Martín Abadi, Luca Cardelli, Benjamin Pierce, and Gordon Plotkin. Dynamic typing in a statically typed language. *ACM Transactions on Programming Languages and Systems*, 13(2):237–268, April 1991. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/103138.html>.
- [ACS84] James E. Archer, Jr., Richard Conway, and Fred B. Schneider. User recovery and reversal in interactive systems. *ACM Transactions on Programming Languages and Systems*, 6(1):1–19, January 1984. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [ACW90] S. Aggarwal, C. Courcoubetis, and P. Wolper. Adding liveness properties to coupled finite-state machines. *ACM Transactions on Programming Languages and Systems*, 12(2):303–339, April 1990. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/78948.html>.
- [AD98] J. Michael Ashley and R. Kent Dybvig. A practical and flexible flow analysis for higher-order languages. *ACM Transactions on Programming Languages and Systems*, 20(4):845–868, July 1998. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/toplas/1998-20-4/p845-ashley/>.

Attali:1996:NSE

[ACS84]

Archer:1984:URR**Aggarwal:1990:ALP**

[ACW90]

Alur:2011:SMC

[ACM11]

Ashley:1998:PFF

[AD98]

Abadi:1991:DTS

[ACPP91]

Afek:1994:BFF

- [ADG⁺94] Yehuda Afek, Danny Dolev, Eli Gafni, Michael Merritt, and Nir Shavit. A bounded first-in, first-enabled solution to the ℓ -exclusion problem. *ACM Transactions on Programming Languages and Systems*, 16(3): 939–953, May 1994. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/177731.html>. [AE98]

Alglave:2021:ACF

- [ADG⁺21] Jade Alglave, Will Deacon, Richard Grisenthwaite, Antoine Haquard, and Luc Maranget. Armed cats: Formal concurrency modelling at Arm. *ACM Transactions on Programming Languages and Systems*, 43(2): 8:1–8:54, July 2021. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <https://dl.acm.org/doi/10.1145/3458926>. [AE01]

Ancona:1991:ECL

- [ADGM91] M. Ancona, G. Doderio, V. Gianuzzi, and M. Morgavi. Efficient construction of LR(k) states and tables. *ACM Transactions on Programming Languages and Systems*, 13(1):150–178, January 1991. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/102809.html>. [AF84]

Ager:2006:FPE

Mads Sig Ager, Olivier Danvy, and Henning Korsholm Rohde. Fast partial evaluation of pattern matching in strings. *ACM Transactions on Programming Languages and Systems*, 28(4): 696–714, July 2006. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).

Attie:1998:SCS

Paul C. Attie and E. Allen Emerson. Synthesis of concurrent systems with many similar processes. *ACM Transactions on Programming Languages and Systems*, 20(1):51–115, January 1998. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/toplas/1998-20-1/p51-attie/>.

Attie:2001:SCP

Paul C. Attie and E. Allen Emerson. Synthesis of concurrent programs for an atomic read/write model of computation. *ACM Transactions on Programming Languages and Systems*, 23(2): 187–242, March 2001. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).

Apt:1984:MDT

Krzysztof R. Apt and Nissem Francez. Modeling the distributed termination convention of CSP. *ACM Transactions on Programming Lan-*

- guages and Systems*, 6(3):370–379, July 1984. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [AF94] Andrew Appel and Charles Fischer. Editorial. *ACM Transactions on Programming Languages and Systems*, 16(4):1079, July 1994. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- Appel:1994:E**
- [AFdR80] Krzysztof R. Apt, Nissim Francez, and Willem P. de Roever. A proof system for communicating sequential processes. *ACM Transactions on Programming Languages and Systems*, 2(3):359–385, July 1980. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). See remarks [Moi83].
- Apt:1980:PSC**
- [AFF06] Martin Abadi, Cormac Flanagan, and Stephen N. Freund. Types for safe locking: Static race detection for Java. *ACM Transactions on Programming Languages and Systems*, 28(2):207–255, March 2006. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- Abadi:2006:TSL**
- [AFV98] María Alpuente, Moreno Falaschi, and Germán Vidal. Partial evaluation of functional logic programs. *ACM Transactions on Programming Languages and Systems*, 20(4):768–844, July 1998. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/toplas/1998-20-4/p768-alpuente/>.
- Appel:1993:Eb**
- [AG93] A. W. Appel and S. L. Graham. Editorial. *ACM Transactions on Programming Languages and Systems*, 15(5):743–744, November 1993. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- Alur:2004:MRH**
- [AG04] Rajeev Alur and Radu Grosu. Modular refinement of hierarchic reactive machines. *ACM Transactions on Programming Languages and Systems*, 26(2):339–369, March 2004. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- Aho:1989:CGU**
- [AGT89] Alfred V. Aho, Mahadevan Ganapathi, and Steven W. K. Tjiang. Code generation using tree matching and dynamic programming. *ACM Transactions on Programming Languages and Systems*, 11(4):491–516, October 1989. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/75700.html>.
- Alpuente:1998:PEF**

- [AH98] **Alur:1998:FF** Rajeev Alur and Thomas A. Henzinger. Finitary fairness. *ACM Transactions on Programming Languages and Systems*, 20(6):1171–1194, November 1998. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/toplas/1998-20-6/p1171-alur/>.
- [AH10] **Apel:2010:CUF** Sven Apel and Delesley Hutchins. A calculus for uniform feature composition. *ACM Transactions on Programming Languages and Systems*, 32(5):19:1–19:33, May 2010. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [AHJR14] **Aung:2014:SS** Min Aung, Susan Horwitz, Rich Joiner, and Thomas Reps. Specialization slicing. *ACM Transactions on Programming Languages and Systems*, 36(2):5:1–5:??, July 2014. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [Ahm20] **Ahmed:2020:ISI** Amal Ahmed. Introduction to the special issue on ESOP 2018. *ACM Transactions on Programming Languages and Systems*, 42(1):1, January 2020. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <https://dl.acm.org/doi/abs/10.1145/3368252>.
- [AK82] **Arsac:1982:STR** J. Arsac and Y. Kodratoff. Some techniques for recursion removal from recursive functions. *ACM Transactions on Programming Languages and Systems*, 4(2):295–322, April 1982. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [AK87] **Allen:1987:ATF** Randy Allen and Ken Kennedy. Automatic translation of Fortran programs to vector form. *ACM Transactions on Programming Languages and Systems*, 9(4):491–542, October 1987. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/29875.html>.
- [AKBLN89] **Ait-Kaci:1989:EIL** Hassan Ait-Kaci, Robert Boyer, Patrick Lincoln, and Roger Nasr. Efficient implementation of lattice operations. *ACM Transactions on Programming Languages and Systems*, 11(1):115–146, January 1989. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/59293.html>.
- [AKNP17] **Alglave:2017:DSF** Jade Alglave, Daniel Kroening, Vincent Nimal, and Daniel Potzl. Don’t sit on the fence: a static analysis approach to automatic fence insertion. *ACM*

- Transactions on Programming Languages and Systems*, 39(2): 6:1–6:??, May 2017. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). [AL95]
- Ait-Kaci:1994:FPC**
- [AKP94] Hassan Ait-Kaci and Andreas Podelski. Functions as passive constraints in LIFE. *ACM Transactions on Programming Languages and Systems*, 16(4): 1279–1318, July 1994. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/183526.html>. [ALZ03]
- Abadi:1993:CS**
- [AL93] Martín Abadi and Leslie Lamport. Composing specifications. *ACM Transactions on Programming Languages and Systems*, 15(1):73–132, January 1993. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/151649.html>. [AM85]
- Abadi:1994:OFR**
- [AL94] Martín Abadi and Leslie Lamport. An old-fashioned recipe for real time. *ACM Transactions on Programming Languages and Systems*, 16(5):1543–1571, September 1994. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/186058.html>. [AM01]
- Abadi:1995:CS**
- Martin Abadi and Leslie Lamport. Conjoining specifications. *ACM Transactions on Programming Languages and Systems*, 17(3):507–534, May 1995. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/201069.html>.
- Ancona:2003:JDJ**
- Davide Ancona, Giovanni Lagorio, and Elena Zucca. Jam—designing a Java extension with mixins. *ACM Transactions on Programming Languages and Systems*, 25(5):641–712, September 2003. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- Atkinson:1985:PPD**
- Malcolm P. Atkinson and Ronald Morrison. Procedures as persistent data objects. *ACM Transactions on Programming Languages and Systems*, 7(4): 539–559, October 1985. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/4477.html>.
- Appel:2001:IMR**
- Andrew W. Appel and David McAllester. An indexed model of recursive types for foundational proof-carrying code. *ACM Transactions on Programming Languages and Systems*, 23(5):

657–683, September 2001. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).

Alglave:2014:HCM

- [AMT14] Jade Alglave, Luc Maranget, and Michael Tautschnig. Herding cats: Modelling, simulation, testing, and data mining for weak memory. *ACM Transactions on Programming Languages and Systems*, 36(2):7:1–7:??, July 2014. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). [Ano83]

Andrews:1981:SR

- [And81] Gregory R. Andrews. Synchronizing resources. *ACM Transactions on Programming Languages and Systems*, 3(4):405–430, October 1981. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). [Ano84]

Anger:1989:LIC

- [Ang89] Frank D. Anger. On Lamport’s interprocessor communication model. *ACM Transactions on Programming Languages and Systems*, 11(3):404–417, July 1989. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/65982.html>. [Ano85]

Anonymous:1982:IA

- [Ano82] Anonymous. Information for authors. *ACM Transactions on Programming Languages and Systems*, 4(3):522–525, July

1982. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).

Anonymous:1983:IA

Anonymous. Information for authors. *ACM Transactions on Programming Languages and Systems*, 5(3):506–509, July 1983. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).

Anonymous:1984:IA

Anonymous. Information for authors. *ACM Transactions on Programming Languages and Systems*, 6(3):444–447, July 1984. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).

Anonymous:1985:IA

Anonymous. Information for authors. *ACM Transactions on Programming Languages and Systems*, 7(3):497–500, July 1985. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).

Anonymous:1986:AI

Anonymous. 1986 author index. *ACM Transactions on Programming Languages and Systems*, 8(4):609–610, October 1986. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).

Anonymous:1986:IA

Anonymous. Information for authors. *ACM Transactions on Programming Languages and*

Systems, 8(3):412–415, July 1986. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).

Anonymous:1987:IA

[Ano87] Anonymous. Information for authors. *ACM Transactions on Programming Languages and Systems*, 9(3):467–470, July 1987. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).

Anonymous:1988:AI

[Ano88a] Anonymous. 1988 author index. *ACM Transactions on Programming Languages and Systems*, 10(4):641–642, October 1988. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).

Anonymous:1988:IA

[Ano88b] Anonymous. Information for authors. *ACM Transactions on Programming Languages and Systems*, 10(3):508–511, July 1988. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).

Anonymous:1989:AI

[Ano89a] Anonymous. 1989 author index. *ACM Transactions on Programming Languages and Systems*, 11(4):669–670, October 1989. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).

Anonymous:1989:IA

[Ano89b] Anonymous. Information for authors. *ACM Transactions on Programming Languages and*

Systems, 11(3):487–490, July 1989. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).

Anonymous:1990:AI

[Ano90a] Anonymous. 1990 author index. *ACM Transactions on Programming Languages and Systems*, 12(4):700–701, October 1990. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).

Anonymous:1990:IA

[Ano90b] Anonymous. Information for authors. *ACM Transactions on Programming Languages and Systems*, 12(3):497–500, July 1990. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).

Anonymous:1991:AI

[Ano91a] Anonymous. 1991 author index. *ACM Transactions on Programming Languages and Systems*, 13(4):634–635, October 1991. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).

Anonymous:1991:IA

[Ano91b] Anonymous. Information for authors. *ACM Transactions on Programming Languages and Systems*, 13(3):447–450, July 1991. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).

Anonymous:1992:AI

[Ano92a] Anonymous. 1992 author index. *ACM Transactions on Programming Languages and Systems*, 14

- (4):617–618, October 1992. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- Anonymous:1992:IA**
- [Ano92b] Anonymous. Information for authors. *ACM Transactions on Programming Languages and Systems*, 14(3):466–469, July 1992. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- Anonymous:1994:AI**
- [Ano94] Anonymous. 1994 author index. *ACM Transactions on Programming Languages and Systems*, 16(6):1904–1907, October 1994. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- Anonymous:1995:AI**
- [Ano95] Anonymous. 1995 author index. *ACM Transactions on Programming Languages and Systems*, 17(6):938–940, November 1995. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- Anonymous:1998:AI**
- [Ano98] Anonymous. 1998 author index. *ACM Transactions on Programming Languages and Systems*, 20(6):1323–1325, November 1998. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- Anonymous:2002:ADC**
- [Ano02a] Anonymous. Automatic derivation of compiler machine descriptions. *ACM Transactions on Programming Languages and Systems*, 24(4):369–408, July 2002. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- Anonymous:2002:LDD**
- [Ano02b] Anonymous. On loops, dominators, and dominance frontiers. *ACM Transactions on Programming Languages and Systems*, 24(5):455–490, September 2002. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- Anonymous:2018:CCL**
- [Ano18] Anonymous. Corrigendum to “Cross-Language Interoperability in a Multi-Language Runtime”, by Grimmer et al., *ACM Transactions on Programming Languages and Systems (TOPLAS) Volume 40, Issue 2, Article No. 8. ACM Transactions on Programming Languages and Systems*, 40(4):18:1–18:??, December 2018. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL https://dl.acm.org/ft_gateway.cfm?id=3283723.
- Arvind:1989:SDS**
- [ANP89] Arvind, Rishiyur S. Nikhil, and Keshav K. Pingali. I-structures: Data structures for parallel computing. *ACM Transactions on Programming Languages and Systems*, 11(4):598–632, October 1989. CODEN ATPSDT. ISSN 0164-0925

- (print), 1558-4593 (electronic).
 URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/69562.html>.
- [Ans87] Ed Anson. A generalized iterative construct and its semantics. *ACM Transactions on Programming Languages and Systems*, 9(4):567–581, October 1987. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/30391.html>.
- [AOC⁺88] Gregory R. Andrews, Ronald A. Olsson, Michael Coffin, Irving Elshoff, Kelvin Nilsen, Titus Purdin, and Gregg Townsend. An overview of the SR language and implementation. *ACM Transactions on Programming Languages and Systems*, 10(1):51–86, January 1988. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/42324.html>.
- [AP94] Krzysztof R. Apt and Alessandro Pellegrini. On the occur-check-free Prolog programs. *ACM Transactions on Programming Languages and Systems*, 16(3):687–726, May 1994. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/177673.html>.
- [AP07] Martín Abadi and Jens Palsberg. Editorial. *ACM Transactions on Programming Languages and Systems*, 29(3):14:1, May 2007. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [App93] Andrew W. Appel. Editorial. *ACM Transactions on Programming Languages and Systems*, 15(2):209–210, April 1993. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [App94a] A. W. Appel. Axiomatic bootstrapping: a guide for compiler hackers. *ACM Transactions on Programming Languages and Systems*, 16(6):1699–1718, November 1994. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/197336.html>.
- [App94b] Andrew Appel. Purpose and scope. *ACM Transactions on Programming Languages and Systems*, 16(1):1–2, January 1994. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).

- [App15] **Appel:2015:VCP**
Andrew W. Appel. Verification of a cryptographic primitive: SHA-256. *ACM Transactions on Programming Languages and Systems*, 37(2):7:1–7:??, April 2015. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [Apt81] **Apt:1981:TYH**
Krzysztof R. Apt. Ten years of Hoare’s logic: a survey — Part I. *ACM Transactions on Programming Languages and Systems*, 3(4):431–483, October 1981. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [Apt86] **Apt:1986:CPD**
Krzysztof R. Apt. Correctness proofs of distributed termination algorithms. *ACM Transactions on Programming Languages and Systems*, 8(3):388–405, July 1986. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/6000.html>.
- [Apt00] **Apt:2000:RCC**
Krzysztof R. Apt. The role of commutativity in constraint propagation algorithms. *ACM Transactions on Programming Languages and Systems*, 22(6):1002–1036, 2000. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/articles/>
- journals/toplas/2000-22-6/p1002-apt/p1002-apt.pdf;
<http://www.acm.org/pubs/citations/journals/toplas/2000-22-6/p1002-apt/>.
- Andrews:1980:AAI**
Gregory R. Andrews and Richard P. Reitman. An axiomatic approach to information flow in programs. *ACM Transactions on Programming Languages and Systems*, 2(1):56–76, January 1980. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- Appelbe:1984:ECS**
William F. Appelbe and A. P. Ravn. Encapsulation constructs in systems programming languages. *ACM Transactions on Programming Languages and Systems*, 6(2):129–158, April 1984. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- Arnold:1980:URG**
D. B. Arnold and M. R. Sleep. Uniform random generation of balanced parenthesis strings. *ACM Transactions on Programming Languages and Systems*, 2(1):122–128, January 1980. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- Alpern:1989:VTP**
Bowen Alpern and Fred B. Schneider. Verifying temporal properties without temporal logic. *ACM Transac-*
- [AR80]
- [AR84]
- [AS80]
- [AS89]

- tions on Programming Languages and Systems*, 11(1):147–167, January 1989. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/62028.html>. [ATD08]
- Andersen:2019:FSP**
- [ASAVF19] Leif Andersen, Vincent St-Amour, Jan Vitek, and Matthias Felleisen. Feature-specific profiling. *ACM Transactions on Programming Languages and Systems*, 41(1):4:1–4:??, March 2019. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL https://dl.acm.org/ft_gateway.cfm?id=3275519. [AW82]
- Austin:2017:MFD**
- [ASF17] Thomas H. Austin, Tommy Schmitz, and Cormac Flanagan. Multiple facets for dynamic information flow with exceptions. *ACM Transactions on Programming Languages and Systems*, 39(3):10:1–10:??, July 2017. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). [AW85]
- Assmann:2000:GRS**
- [Ass00] Uwe Assmann. Graph rewrite systems for program optimization. *ACM Transactions on Programming Languages and Systems*, 22(4):583–637, 2000. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/citations/journals/toplas/2000-22-4/p583-assmann/>. [AWW95]
- Arenaz:2008:XEF**
- Manuel Arenaz, Juan Touriño, and Ramon Doallo. XARK: an extensible framework for automatic recognition of computational kernels. *ACM Transactions on Programming Languages and Systems*, 30(6):32:1–32:56, October 2008. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- Ashcroft:1982:RS**
- E. A. Ashcroft and W. W. Wadge. **R** for semantics. *ACM Transactions on Programming Languages and Systems*, 4(2):283–294, April 1982. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- Avrunin:1985:DAD**
- George S. Avrunin and Jack C. Wileden. Describing and analyzing distributed software system designs. *ACM Transactions on Programming Languages and Systems*, 7(3):380–403, July 1985. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/3989.html>.
- Aiken:1995:SST**
- Alexander Aiken, John H. Williams, and Edward L. Wimmers. Safe: a semantic technique for transforming programs in the presence of errors. *ACM Transactions on Programming Languages and Systems*, 17(1):

- 63–84, January 1995. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). [BA08]
 URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/201002.html>.
- [AY01] Rajeev Alur and Mihalis Yannakakis. Model checking of hierarchical state machines. *ACM Transactions on Programming Languages and Systems*, 23(3):273–303, May 2001. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [BA84] Mordechai Ben-Ari. Algorithms for on-the-fly garbage collection. *ACM Transactions on Programming Languages and Systems*, 6(3):333–344, July 1984. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [BA99] Matthias Blume and Andrew W. Appel. Hierarchical modularity. *ACM Transactions on Programming Languages and Systems*, 21(4):813–847, July 1999. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/articles/journals/toplas/1999-21-4/p813-blume/p813-blume.pdf>; <http://www.acm.org/pubs/citations/journals/toplas/1999-21-4/p813-blume/>.
- [Bac84] Roland Backhouse. Global data flow analysis problems arising in locally least-cost error recovery. *ACM Transactions on Programming Languages and Systems*, 6(2):192–214, April 1984. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [BAC16] Uday Bondhugula, Aravind Acharya, and Albert Cohen. The Pluto+ algorithm: a practical approach for parallelization and locality optimization of affine loop nests. *ACM Transactions on Programming Languages and Systems*, 38(3):12:1–12:??, May 2016. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [Bag89] Rajive Bagrodia. Synchronization of asynchronous processes in CSP. *ACM Transactions on Programming Languages and Systems*, 11(4):585–597, October 1989. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- Ben-Amram:2008:SCT**
 Amir M. Ben-Amram. Size-change termination with difference constraints. *ACM Transactions on Programming Languages and Systems*, 30(3):16:1–16:31, May 2008. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- Backhouse:1984:GDF**
- Ben-Ari:1984:AFG**
- Bondhugula:2016:PAP**
- Blume:1999:HM**
- Bagrodia:1989:SAP**

- URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/69561.html>.
- Ben-Amram:2012:TIL**
- [BAGM12] Amir M. Ben-Amram, Samir Genaim, and Abu Naser Masud. On the termination of integer loops. *ACM Transactions on Programming Languages and Systems*, 34(4):16:1–16:24, December 2012. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- Baker:1982:OPA**
- [Bak82] T. P. Baker. A one-pass algorithm for overload resolution in Ada. *ACM Transactions on Programming Languages and Systems*, 4(4):601–614, October 1982. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- Ball:1994:ECP**
- [Bal94] Thomas Ball. Efficiently counting program events with support for on-line queries. *ACM Transactions on Programming Languages and Systems*, 16(5):1399–1410, September 1994. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/186027.html>.
- Ben-Amram:2007:PTA**
- [BAL07] Amir M. Ben-Amram and Chin Soon Lee. Program termination analysis in polynomial time. *ACM Transactions on Programming Languages and Systems*, 29(1):5:1–5:37, January 2007. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- Brecht:2006:CGC**
- [BALP06] Tim Brecht, Eshrat Arjomandi, Chang Li, and Hang Pham. Controlling garbage collection and heap growth to reduce the execution time of Java applications. *ACM Transactions on Programming Languages and Systems*, 28(5):908–941, September 2006. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- Banerjee:1987:MSR**
- [Ban87] Debasish Banerjee. A methodology for synthesis of recursive functional programs. *ACM Transactions on Programming Languages and Systems*, 9(3):441–462, July 1987. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/24071.html>.
- Banerjee:2011:MFT**
- [Ban11] Utpal Banerjee. Mathematical foundation of trace scheduling. *ACM Transactions on Programming Languages and Systems*, 33(3):10:1–10:24, April 2011. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- Barnden:1981:NCA**
- [Bar81] J. A. Barnden. Nonsequentiality and concrete activity phases

- in discrete-event simulation languages. *ACM Transactions on Programming Languages and Systems*, 3(3):293–317, July 1981. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [Bar85] David Barstow. On convergence toward a database of program transformations. *ACM Transactions on Programming Languages and Systems*, 7(1):1–9, January 1985. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/2364.html>.
- [BB79] Eric Beyer and Peter Buneman. A space efficient dynamic allocation algorithm for queuing messages. *ACM Transactions on Programming Languages and Systems*, 1(2):287–294, October 1979. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [BB94] Peter T. Breuer and Jonathan P. Bowen. Decompilation: The enumeration of types and grammars. *ACM Transactions on Programming Languages and Systems*, 16(5):1613–1647, September 1994. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/186093.html>.
- [BBC16] Somashekaracharya G. Bhaskaracharya, Uday Bondhugula, and Albert Cohen. Automatic storage optimization for arrays. *ACM Transactions on Programming Languages and Systems*, 38(3):11:1–11:??, May 2016. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [BBF⁺11] Jesper Bengtson, Karthikeyan Bhargavan, Cédric Fournet, Andrew D. Gordon, and Sergio Maffei. Refinement types for secure implementations. *ACM Transactions on Programming Languages and Systems*, 33(2):8:1–8:45, January 2011. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [BBTS07] Bodil Biering, Lars Birkedal, and Noah Torp-Smith. BI-hyperdoctrines, higher-order separation logic, and abstraction. *ACM Transactions on Programming Languages and Systems*, 29(5):24:1–24:35, August 2007. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [BBYG⁺05] Katherine Barabash, Ori Ben-Yitzhak, Irit Gofit, Elliot K. Kolodner, Victor Leikehman, Yoav Ossia, Avi Owshanko, and

- Erez Petrank. A parallel, incremental, mostly concurrent garbage collector for servers. *ACM Transactions on Programming Languages and Systems*, 27(6):1097–1146, November 2005. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). [BC91]
- [BC79] Daniel G. Bobrow and Douglas W. Clark. Compact encodings of list structure. *ACM Transactions on Programming Languages and Systems*, 1(2):266–286, October 1979. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). [BCC04]
- [BC85a] Joseph L. Bates and Robert L. Constable. Proofs as programs. *ACM Transactions on Programming Languages and Systems*, 7(1):113–136, January 1985. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/2528.html>. [BCD90]
- [BC85b] Jean-François Bergeretti and Bernard A. Carré. Information-flow and data-flow analysis of while-programs. *ACM Transactions on Programming Languages and Systems*, 7(1):37–61, January 1985. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/2366.html>. [Bossi:1990:MSL]
- [Bossi:1990:MSL] A. Bossi, N. Cocco, and S. Dulli. A method for specializing logic programs. *ACM Transactions on Programming Languages and Systems*, 12(2):253–302, April 1990. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/78947.html>. [Betts:2015:DIV]
- [Betts:2015:DIV] Adam Betts, Nathan Chong, Alastair F. Donaldson, Jeroen Ketema, Shaz Qadeer, Paul Antonio Brogi and Paolo Ciancarini. The concurrent language, Shared Prolog. *ACM Transactions on Programming Languages and Systems*, 13(1):99–123, January 1991. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/102807.html>. [Bugliesi:2004:ACM]
- [Bugliesi:2004:ACM] Michele Bugliesi, Giuseppe Castagna, and Silvia Crafa. Access control for mobile agents: The calculus of boxed ambients. *ACM Transactions on Programming Languages and Systems*, 26(1):57–124, January 2004. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). [Bates:1985:PP]
- [Bates:1985:PP] Joseph L. Bates and Robert L. Constable. Proofs as programs. *ACM Transactions on Programming Languages and Systems*, 7(1):113–136, January 1985. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). [Bergeretti:1985:IFD]
- [Bergeretti:1985:IFD] Jean-François Bergeretti and Bernard A. Carré. Information-flow and data-flow analysis of while-programs. *ACM Transactions on Programming Languages and Systems*, 7(1):37–61, January 1985. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). [Bobrow:1979:CEL]
- [Bobrow:1979:CEL] Daniel G. Bobrow and Douglas W. Clark. Compact encodings of list structure. *ACM Transactions on Programming Languages and Systems*, 1(2):266–286, October 1979. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). [Brogi:1991:CLS]
- [Brogi:1991:CLS] Antonio Brogi and Paolo Ciancarini. The concurrent language, Shared Prolog. *ACM Transactions on Programming Languages and Systems*, 13(1):99–123, January 1991. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/102807.html>. [Brows:1979:CEL]
- [Brows:1979:CEL] Daniel G. Bobrow and Douglas W. Clark. Compact encodings of list structure. *ACM Transactions on Programming Languages and Systems*, 1(2):266–286, October 1979. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). [Bugliesi:2004:ACM]
- [Bugliesi:2004:ACM] Michele Bugliesi, Giuseppe Castagna, and Silvia Crafa. Access control for mobile agents: The calculus of boxed ambients. *ACM Transactions on Programming Languages and Systems*, 26(1):57–124, January 2004. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). [Bossi:1990:MSL]
- [Bossi:1990:MSL] A. Bossi, N. Cocco, and S. Dulli. A method for specializing logic programs. *ACM Transactions on Programming Languages and Systems*, 12(2):253–302, April 1990. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/78947.html>. [Betts:2015:DIV]
- [Betts:2015:DIV] Adam Betts, Nathan Chong, Alastair F. Donaldson, Jeroen Ketema, Shaz Qadeer, Paul

- Thomson, and John Wicker-
son. The design and imple-
mentation of a verification tech-
nique for GPU kernels. *ACM
Transactions on Programming
Languages and Systems*, 37(3):
10:1–10:??, June 2015. CO-
DEN ATPSDT. ISSN 0164-0925
(print), 1558-4593 (electronic).
- Bugliesi:2015:ART**
- [BCEM15] Michele Bugliesi, Stefano Calzavara,
Fabienne Eigner, and Matteo
Maffei. Affine refinement types
for secure distributed program-
ming. *ACM Transactions on
Programming Languages and
Systems*, 37(4):11:1–11:??, Au-
gust 2015. CODEN ATPSDT.
ISSN 0164-0925 (print), 1558-
4593 (electronic).
- Benton:2004:MCA**
- [BCF04] Nick Benton, Luca Cardelli, and
Cédric Fournet. Modern con-
currency abstractions for C#.
*ACM Transactions on Program-
ming Languages and Systems*,
26(5):769–804, September 2004.
CODEN ATPSDT. ISSN 0164-
0925 (print), 1558-4593 (elec-
tronic).
- Bruynooghe:2007:TAL**
- [BCG⁺07] Maurice Bruynooghe, Michael
Codish, John P. Gallagher,
Samir Genaim, and Wim Van-
hoof. Termination analysis of
logic programs through com-
bination of type-based norms.
*ACM Transactions on Program-
ming Languages and Systems*, 29
(2):10:1–10:44, April 2007. CO-
- Bottoni:1999:SDC**
- [BCM99] P. Bottoni, M. F. Costabile,
and P. Mussio. Specifica-
tion and dialogue control of
visual interaction through vi-
sual rewriting systems. *ACM
Transactions on Programming
Languages and Systems*, 21
(6):1077–1136, November 1999.
CODEN ATPSDT. ISSN
0164-0925 (print), 1558-4593
(electronic). URL [http://
www.acm.org/pubs/articles/
journals/toplas/1999-21-6/
p1077-bottoni/p1077-bottoni.
pdf](http://www.acm.org/pubs/articles/journals/toplas/1999-21-6/p1077-bottoni/p1077-bottoni.pdf); [http://www.acm.org/
pubs/citations/journals/toplas/
1999-21-6/p1077-bottoni/](http://www.acm.org/pubs/citations/journals/toplas/1999-21-6/p1077-bottoni/).
- Bhatia:2008:RSE**
- [BCP08] Sapan Bhatia, Charles Consel,
and Calton Pu. Remote spe-
cialization for efficient embed-
ded operating systems. *ACM
Transactions on Programming
Languages and Systems*, 30(4):
22:1–22:32, July 2008. CO-
DEN ATPSDT. ISSN 0164-0925
(print), 1558-4593 (electronic).
- Briggs:1994:IGC**
- [BCT94] Preston Briggs, Keith D.
Cooper, and Linda Torczon.
Improvements to graph color-
ing register allocation. *ACM
Transactions on Programming
Languages and Systems*, 16(3):
428–455, May 1994. CODEN
ATPSDT. ISSN 0164-0925
(print), 1558-4593 (electronic).

URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/177575.html>.

Bergstra:1997:TCT

- [BDFH97] J. A. Bergstra, T. B. Dinesh, J. Field, and J. Heering. Toward a complete transformational toolkit for compilers. *ACM Transactions on Programming Languages and Systems*, 19(5):639–684, September 1997. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/toplas/1997-19-5/p639-bergstra/>.

Bartoletti:2009:LPR

- [BDFZ09] Massimo Bartoletti, Pierpaolo Degano, Gian-Luigi Ferrari, and Roberto Zunino. Local policies for resource usage analysis. *ACM Transactions on Programming Languages and Systems*, 31(6):23:1–23:43, August 2009. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).

Blackburn:2016:TWT

- [BDH⁺16] Stephen M. Blackburn, Amer Diwan, Matthias Hauswirth, Peter F. Sweeney, José Nelson Amaral, Tim Brecht, Lubomír Bulej, Cliff Click, Lieven Eeckhout, Sebastian Fischmeister, Daniel Frampton, Laurie J. Hendren, Michael Hind, Antony L. Hosking, Richard E. Jones, Tomas Kalibera, Nathan Keynes, Nathaniel Nystrom, and

Andreas Zeller. The truth, the whole truth, and nothing but the truth: a pragmatic guide to assessing empirical evaluations. *ACM Transactions on Programming Languages and Systems*, 38(4):15:1–15:??, October 2016. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).

Botincan:2013:PDP

- [BDJ13] Matko Botincan, Mike Dodds, and Suresh Jagannathan. Proof-directed parallelization synthesis by separation logic. *ACM Transactions on Programming Languages and Systems*, 35(2):8:1–8:??, July 2013. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).

Bernardeschi:2008:DBV

- [BDL⁺08] C. Bernardeschi, N. De Francesco, G. Lettieri, L. Martini, and P. Masci. Decomposing bytecode verification by abstract interpretation. *ACM Transactions on Programming Languages and Systems*, 31(1):3:1–3:63, December 2008. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).

Bueno:1999:EAI

- [BdlBH99] Francisco Bueno, María García de la Banda, and Manuel Hermenegildo. Effectiveness of abstract interpretation in automatic parallelization: a case study in logic programming. *ACM Transactions on Programming Languages and Systems*, 21

- (2):189–239, March 1999. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). [BE94]
 URL <http://www.acm.org/pubs/citations/journals/toplas/1999-21-2/p189-bueno/>.
- [BDM15] Dariusz Biernacki, Olivier Danvy, and Kevin Millikin. A dynamic continuation-passing style for dynamic delimited continuations. *ACM Transactions on Programming Languages and Systems*, 38(1):2:1–2:??, October 2015. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). [BE13]
- [BDP93] Mic Bowman, Saumya K. Debray, and Larry L. Peterson. Reasoning about naming systems. *ACM Transactions on Programming Languages and Systems*, 15(5):795–825, November 1993. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/161471.html>. [Bee94]
- [BDP14] Gilles Barthe, Delphine Demange, and David Pichardie. Formal verification of an SSA-Based middle-end for CompCert. *ACM Transactions on Programming Languages and Systems*, 36(1):4:1–4:??, March 2014. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- Bossì:1994:TAP**
 Annalisa Bossi and Sandro Etalle. Transforming acyclic programs. *ACM Transactions on Programming Languages and Systems*, 16(4):1081–1096, July 1994. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/183434.html>.
- Bouajjani:2013:ARP**
 Ahmed Bouajjani and Michael Emmi. Analysis of recursively parallel programs. *ACM Transactions on Programming Languages and Systems*, 35(3):10:1–10:49, November 2013. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- Beemster:1994:SOG**
 Marcel Beemster. Strictness optimization for graph reduction machines (Why id might not be strict). *ACM Transactions on Programming Languages and Systems*, 16(5):1449–1466, September 1994. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/186040.html>.
- Brockschmidt:2016:ARS**
 Marc Brockschmidt, Fabian Emmes, Stephan Falke, Carsten Fuhs, and Jürgen Giesl. Analyzing runtime and size complexity of integer programs. *ACM*
- Biernacki:2015:DCP**
- Bowman:1993:RAN**
- Barthe:2014:FVS**

- Transactions on Programming Languages and Systems*, 38(4): 13:1–13:??, October 2016. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [Ber80] Arthur Bernstein. Output guards and nondeterminism in “Communicating Sequential Processes”. *ACM Transactions on Programming Languages and Systems*, 2(2):234–238, April 1980. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). Bernstein presents a distributed algorithm for CSP output guards based on priority ordering of processes.
- [Ber94] V. Berzins. Software merge: Semantics of combining changes to programs. *ACM Transactions on Programming Languages and Systems*, 16(6):1875–1903, November 1994. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/197403.html>.
- [BF87] Michael G. Burke and Gerald A. Fisher. A practical method for LR and LL syntactic error diagnosis and recovery. *ACM Transactions on Programming Languages and Systems*, 9(2):164–197, April 1987. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [BFG08] Karthikeyan Bhargavan, Cédric Fournet, and Andrew D. Gordon. Verifying policy-based web services security. *ACM Transactions on Programming Languages and Systems*, 30(6):30:1–30:59, October 2008. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [BFGT08] Karthikeyan Bhargavan, Cédric Fournet, Andrew D. Gordon, and Stephen Tse. Verified interoperable implementations of security protocols. *ACM Transactions on Programming Languages and Systems*, 31(1):5:1–5:57, December 2008. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [BG89a] Valmir Barbosa and Eli Gafni. Concurrency in heavily loaded neighborhood-constrained systems. *ACM Transactions on Programming Languages and Systems*, 11(4):562–584, October 1989. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/69560.html>.
- [BG89b] David Bernstein and Izidor Gertner. Scheduling expressions
- URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/22720.html>.
- Bhargavan:2008:VPB**
- Bernstein:1980:OGN**
- Berzins:1994:SMS**
- Burke:1987:PML**
- Bhargavan:2008:VII**
- Barbosa:1989:CHL**
- Bernstein:1989:SEP**

- on a pipelined processor with a maximal delay of one cycle. *ACM Transactions on Programming Languages and Systems*, 11(1):57–66, January 1989. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/59291.html>. [BGL93]
- Baillot:2022:TCP**
- [BG22] Patrick Baillot and Alexis Ghyselen. Types for complexity of parallel computation in pi-calculus. *ACM Transactions on Programming Languages and Systems*, 44(3):15:1–15:50, September 2022. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <https://dl.acm.org/doi/10.1145/3495529>.
- Binkley:2013:EIL**
- [BGH⁺13] David Binkley, Nicolas Gold, Mark Harman, Syed Islam, Jens Krinke, and Zheng Li. Efficient identification of linchpin vertices in dependence clusters. *ACM Transactions on Programming Languages and Systems*, 35(2):7:1–7:??, July 2013. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- Barthe:2009:CTO**
- [BGKR09] Gilles Barthe, Benjamin Grégoire, César Kunz, and Tamara Rezk. Certificate translation for optimizing compilers. *ACM Transactions on Programming Languages and Systems*, 31(5):18:1–18:45, June 2009. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- Barbuti:1993:GFS**
- Roberto Barbuti, Roberto Giacobazzi, and Giorgio Levi. A general framework for semantics-based bottom-up abstract interpretation of logic programs. *ACM Transactions on Programming Languages and Systems*, 15(1):133–181, January 1993. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/151650.html>.
- Bultan:1999:MCC**
- [BGP99] Tevfik Bultan, Richard Gerber, and William Pugh. Model-checking concurrent systems with unbounded integer variables: symbolic representations, approximations, and experimental results. *ACM Transactions on Programming Languages and Systems*, 21(4):747–789, July 1999. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/articles/journals/toplas/1999-21-4/p747-bultan/p747-bultan.pdf>; <http://www.acm.org/pubs/citations/journals/toplas/1999-21-4/p747-bultan/>.
- Butler:1999:RAG**
- [BH99] Michael Butler and Pieter Hartel. Reasoning about Grover’s quantum search algorithm using probabilistic *wp*.

- ACM Transactions on Programming Languages and Systems*, 21(3):417–429, May 1999. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/articles/journals/toplas/1999-21-3/p417-butler/p417-butler.pdf>; <http://www.acm.org/pubs/citations/journals/toplas/1999-21-3/p417-butler/>.
- [BH05a] Godmar Back and Wilson C. Hsieh. The KaffeOS Java runtime system. *ACM Transactions on Programming Languages and Systems*, 27(4):583–630, July 2005. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [BH05b] Peter A. Buhr and Ashif S. Harji. Implicit-signal monitors. *ACM Transactions on Programming Languages and Systems*, 27(6):1270–1343, November 2005. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [BHK07] David Binkley, Mark Harman, and Jens Krinke. Empirical study of optimization techniques for massive slicing. *ACM Transactions on Programming Languages and Systems*, 30(1):3:1–3:33, November 2007. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [BHM⁺07] Stephen M. Blackburn, Matthew Hertz, Kathryn S. McKinley, J. Eliot B. Moss, and Ting Yang. Profile-based pretenuring. *ACM Transactions on Programming Languages and Systems*, 29(1):2:1–2:57, January 2007. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [BHM⁺19] Emery D. Berger, Celeste Holtenbeck, Petr Maj, Olga Vitek, and Jan Vitek. On the impact of programming languages on code quality: a reproduction study. *ACM Transactions on Programming Languages and Systems*, 41(4):21:1–21:??, November 2019. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL https://dl.acm.org/ft_gateway.cfm?id=3340571.
- [Bir84] R. S. Bird. The promotion and accumulation strategies in transformational programming. *ACM Transactions on Programming Languages and Systems*, 6(4):487–504, October 1984. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). See addendum [Bir85].
- [Bir85] R. S. Bird. Addendum: “The Promotion and Accumulation Strategies in Transformational Programming”. *ACM Trans-*

Blackburn:2007:PBP**Back:2005:KJR****Berger:2019:IPL****Buhr:2005:ISM****Bird:1984:PAS****Binkley:2007:ESO****Bird:1985:APA**

actions on Programming Languages and Systems, 7(3):490–492, July 1985. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). See [Bir84].

Barthe:2011:AMC

- [BK11] Gilles Barthe and César Kunz. An abstract model of certificate translation. *ACM Transactions on Programming Languages and Systems*, 33(4):13:1–13:46, July 2011. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).

Broy:1980:DIA

- [BKB80] Manfred Broy and Bernd Krieg-Brückner. Derivation of invariant assertions during program development by transformation. *ACM Transactions on Programming Languages and Systems*, 2(3):321–337, July 1980. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).

Breuer:1997:RCS

- [BKL⁺97] Peter T. Breuer, Carlos Delgado Kloos, Andrés Marín López, Natividad Martínez Madrid, and Luis Sánchez Fernández. A refinement calculus for the synthesis of verified hardware descriptions in VHDL. *ACM Transactions on Programming Languages and Systems*, 19(4):586–616, July 1997. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org:80/pubs/citations/>

[journals/toplas/1997-19-4/p586-breuer/](http://www.acm.org:80/pubs/citations/journals/toplas/1997-19-4/p586-breuer/).

Barthe:2013:PRR

- [BKOZB13] Gilles Barthe, Boris Köpf, Federico Olmedo, and Santiago Zanella-Béguelin. Probabilistic relational reasoning for differential privacy. *ACM Transactions on Programming Languages and Systems*, 35(3):9:1–9:49, November 2013. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).

Buchsbaum:1998:NSL

- [BKRW98] Adam L. Buchsbaum, Haim Kaplan, Anne Rogers, and Jeffrey R. Westbrook. A new, simpler linear-time dominators algorithm. *ACM Transactions on Programming Languages and Systems*, 20(6):1265–1296, November 1998. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/toplas/1998-20-6/p1265-buchsbaum/>. See corrigendum [BKRW05].

Buchsbaum:2005:CNS

- [BKRW05] Adam L. Buchsbaum, Haim Kaplan, Anne Rogers, and Jeffrey R. Westbrook. Corrigendum: “A new, simpler linear-time dominators algorithm”. *ACM Transactions on Programming Languages and Systems*, 27(3):383–387, May 2005. CODEN ATPSDT. ISSN 0164-0925

- (print), 1558-4593 (electronic). See [BKRW98].
- [BKS88] R. J. R. Back and R. Kurki-Suonio. Distributed cooperation with action systems. *ACM Transactions on Programming Languages and Systems*, 10(4): 513–554, October 1988. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/48023.html>.
- [BL87] Lubomir Bic and Craig Lee. A data-driven model for a subset of logic programming. *ACM Transactions on Programming Languages and Systems*, 9(4): 618–645, October 1987. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/31333.html>.
- [BL94a] Thomas Ball and James R. Larus. Optimally profiling and tracing programs. *ACM Transactions on Programming Languages and Systems*, 16(4): 1319–1360, July 1994. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/183527.html>.
- [BL94b] Joseph Bates and Alon Lavie. Recognizing substrings of LR(k) languages in linear time. *ACM Transactions on Programming Languages and Systems*, 16(3): 1051–1077, May 1994. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/177768.html>.
- [Bla03] Bruno Blanchet. Escape analysis for JavaTM: Theory and practice. *ACM Transactions on Programming Languages and Systems*, 25(6):713–775, November 2003. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [BLH12] Eric Bodden, Patrick Lam, and Laurie Hendren. Partially evaluating finite-state runtime monitors ahead of time. *ACM Transactions on Programming Languages and Systems*, 34(2): 7:1–7:52, June 2012. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [Blo94] Adrienne Bloss. Path analysis and the optimization of nonstrict functional languages. *ACM Transactions on Programming Languages and Systems*, 16(3):328–369, May 1994. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).

Bates:1994:RSL**Back:1988:DCA****Blanchet:2003:EAJ****Bic:1987:DDM****Bodden:2012:PEF****Ball:1994:OPT****Bloss:1994:PAO**

- URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/177497.html>.
- [BLRS12] Gérard Boudol, Zhengqin Luo, Tamara Rezk, and Manuel Serano. Reasoning about Web applications: An operational semantics for HOP. *ACM Transactions on Programming Languages and Systems*, 34(2):10:1–10:40, June 2012. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [Blu99] Matthias Blume. Dependency analysis for Standard ML. *ACM Transactions on Programming Languages and Systems*, 21(4):790–812, July 1999. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/articles/journals/toplas/1999-21-4/p790-blume/p790-blume.pdf>; <http://www.acm.org/pubs/citations/journals/toplas/1999-21-4/p790-blume/>.
- [BM94] M. M. Brandis and H. Moessenboeck. Single-pass generation of static single-assignment form for structured languages. *ACM Transactions on Programming Languages and Systems*, 16(6):1684–1698, November 1994. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/197331.html>.
- [BMPT94] Antonio Brogi, Paolo Mancarella, Dino Pedreschi, and Franco Turini. Modular logic programming. *ACM Transactions on Programming Languages and Systems*, 16(4):1361–1398, July 1994. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/183528.html>.
- [BMR01] Stefano Bistarelli, Ugo Montanari, and Francesca Rossi. Semiring-based constraint logic programming: syntax and semantics. *ACM Transactions on Programming Languages and Systems*, 23(1):1–29, January 2001. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [BMR05] Thomas Ball, Todd Millstein, and Sriram K. Rajamani. Polymorphic predicate abstraction. *ACM Transactions on Programming Languages and Systems*, 27(2):314–343, March 2005. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [BMW91] Jürgen Börstler, Ulrich Möncke, and Reinhard Wilhelm. Table compression for tree automata.

Boudol:2012:RAW**Brogi:1994:MLP****Blume:1999:DAS****Bistarelli:2001:SBC****Brandis:1994:SPG****Ball:2005:PPA****Borstler:1991:TCT**

- ACM Transactions on Programming Languages and Systems*, 13(3):295–314, July 1991. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/BNNN22117013.html>.
- [BN94] Manfred Broy and Greg Nelson. Adding fair choice to Dijkstra’s calculus. *ACM Transactions on Programming Languages and Systems*, 16(3):924–938, May 1994. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/177727.html>.
- [BN99] Eberhard Bertsch and Mark-Jan Nederhof. On failure of the pruning technique in “Error Repair in Shift-Reduce Parsers”. *ACM Transactions on Programming Languages and Systems*, 21(1):1–10, January 1999. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/citations/journals/toplas/1999-21-1/p1-bertsch/>. See [MYD95].
- [BNN18] Anindya Banerjee, David A. Naumann, and Mohammad Nikouei. A logical analysis of framing for specifications with pure method calls. *ACM Transactions on Programming Languages and Systems*, 40(2):6:1–6:??, June 2018. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [Broy:1994:AFC]
- [Banerjee:2022:RPL]
- Anindya Banerjee, Ramana Nagasamudram, David Naumann, and Mohammad Nikouei. A relational program logic with data abstraction and dynamic framing. *ACM Transactions on Programming Languages and Systems*, 44(4):25:1–25:??, December 2022. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <https://dl.acm.org/doi/10.1145/3551497>.
- [Busi:2021:SIE]
- [BNV⁺21] Matteo Busi, Job Noorman, Jo Van Bulck, Letterio Galletta, Pierpaolo Degano, Jan Tobias Mühlberg, and Frank Piessens. Securing interruptible enclaved execution on small microprocessors. *ACM Transactions on Programming Languages and Systems*, 43(3):12:1–12:77, September 2021. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <https://dl.acm.org/doi/10.1145/3470534>.
- [Bohm:1994:TIP]
- [BO94] A. P. W. Böhm and R. R. Oldhoeft. Two issues in parallel language design. *ACM Transactions on Programming Languages and Systems*, 16(6):1675–1683, November 1994. CODEN ATPSDT. ISSN 0164-0925

(print), 1558-4593 (electronic).
 URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/197325.html>.

Bobrow:1980:MRS

- [Bob80] Daniel G. Bobrow. Managing reentrant structures using reference counts. *ACM Transactions on Programming Languages and Systems*, 2(3):269–273, July 1980. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).

Boehm:1985:SEA

- [Boe85] Hans-Juergen Boehm. Side effects and aliasing can have simple axiomatic descriptions. *ACM Transactions on Programming Languages and Systems*, 7(4):637–655, October 1985. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/4474.html>.

Boom:1982:WPL

- [Boo82] H. J. Boom. A weaker precondition for loops. *ACM Transactions on Programming Languages and Systems*, 4(4):668–677, October 1982. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).

Borning:1981:PLA

- [Bor81] Alan Borning. The programming language aspects of ThingLab, a constraint-oriented simulation laboratory. *ACM Transactions on Programming Languages and*

Systems, 3(4):353–387, October 1981. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).

Boute:1988:SSP

- [Bou88] Raymond T. Boute. System semantics: Principles, applications, and implementation. *ACM Transactions on Programming Languages and Systems*, 10(1):118–155, January 1988. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/45067.html>.

Boute:1992:EDF

- [Bou92] Raymond T. Boute. The Euclidean definition of the functions div and mod. *ACM Transactions on Programming Languages and Systems*, 14(2):127–144, April 1992. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/128862.html>.

Boute:2005:FDL

- [Bou05] Raymond Boute. Functional declarative language design and predicate calculus: a practical approach. *ACM Transactions on Programming Languages and Systems*, 27(5):988–1047, September 2005. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).

- [Bou06] **Butte:2006:CSD**
 Raymond T. Boute. Calculational semantics: Deriving programming theories from equations by functional predicate calculus. *ACM Transactions on Programming Languages and Systems*, 28(4):747–793, July 2006. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [BOV85] **Bar-On:1985:OPG**
 Ilan Bar-On and Uzi Vishkin. Optimal parallel generation of a computation tree form. *ACM Transactions on Programming Languages and Systems*, 7(2):348–357, April 1985. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/3478.html>.
- [Boy96] **Boyland:1996:CAG**
 John Tang Boyland. Conditional attribute grammars. *ACM Transactions on Programming Languages and Systems*, 18(1):73–108, January 1996. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/225544.html>.
- [Boy10] **Boyland:2010:SFP**
 John Tang Boyland. Semantics of fractional permissions with nesting. *ACM Transactions on Programming Languages and Systems*, 32(6):22:1–22:33, August 2010. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [BP82] **Broy:1982:CAA**
 Manfred Broy and Peter Pepper. Combining algebraic and algorithmic reasoning: An approach to the Schorr–Waite algorithm. *ACM Transactions on Programming Languages and Systems*, 4(3):362–381, July 1982. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [BP89] **Burns:1989:USS**
 James E. Burns and Jan Pachi. Uniform self-stabilizing rings. *ACM Transactions on Programming Languages and Systems*, 11(2):330–344, April 1989. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/63403.html>.
- [BP12] **Bendersky:2012:SOB**
 Anna Bendersky and Erez Petrank. Space overhead bounds for dynamic memory management with partial compaction. *ACM Transactions on Programming Languages and Systems*, 34(3):13:1–13:43, October 2012. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [BPP16] **Balabonski:2016:DFM**
 Thibaut Balabonski, François Pottier, and Jonathan Protzenko.

- The design and formalization of Mezzo, a permission-based programming language. *ACM Transactions on Programming Languages and Systems*, 38(4): 14:1–14:??, October 2016. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [BR97] **Baumgartner:1997:ISC**
Gerald Baumgartner and Vincent F. Russo. Implementing signatures for C++. *ACM Transactions on Programming Languages and Systems*, 19(1): 153–187, January 1997. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/citations/journals/toplas/1997-19-1/p153-baumgartner/>.
- [BR10] **Balakrishnan:2010:WWY**
Gogul Balakrishnan and Thomas Reps. WYSINWYX: What you see is not what you eXecute. *ACM Transactions on Programming Languages and Systems*, 32(6):23:1–23:84, August 2010. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [Bre89] **Brent:1989:EIF**
R. P. Brent. Efficient implementation of the first-fit strategy for dynamic storage allocation. *ACM Transactions on Programming Languages and Systems*, 11(3):388–403, July 1989. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [BS83] **Buckley:1983:EIG**
G. N. Buckley and Abraham Silberschatz. An effective implementation for the generalized input-output construct of CSP. *ACM Transactions on Programming Languages and Systems*, 5(2):223–235, April 1983. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). They present a distributed algorithm for CSP output guards based on priority ordering of processes. Their algorithm has the property that two processes that can communicate and do not establish communication with a third process will communicate within a bounded time.
- [BS86] **Bahlke:1986:PSF**
Rolf Bahlke and Gregor Snelling. The PSG system: From formal language definitions to interactive programming environments. *ACM Transactions on Programming Languages and Systems*, 8(4):547–576, October 1986. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/20890.html>.
- [BS88] **Bermudez:1988:NRB**
Manuel E. Bermudez and Karl M. Schimpf. On the (non-) relationship between SLR(1) and NQLALR(1) grammars (tech-

- nical correspondence). *ACM Transactions on Programming Languages and Systems*, 10(2): 338–342, April 1988. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/42276.html>. [Bur84]
- Burton:1984:ACP**
- F. Warren Burton. Annotations to Control Parallelism and Reduction Order in the Distributed Evaluation of Functional Programs. *ACM Transactions on Programming Languages and Systems*, 6(2):159–174, April 1984. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- Bruce:2003:PTS**
- [BSvGF03] Kim B. Bruce, Angela Schuett, Robert van Gent, and Adrian Fiech. PolyTOIL: a type-safe polymorphic object-oriented language. *ACM Transactions on Programming Languages and Systems*, 25(2):225–290, March 2003. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). [Bur90a]
- Burke:1993:IOE**
- [BT93] Michael Burke and Linda Torczon. Interprocedural optimization: Eliminating unnecessary recompilation. *ACM Transactions on Programming Languages and Systems*, 15(3): 367–399, July 1993. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/169678.html>. [Bur90b]
- Burke:1990:IBA**
- Michael Burke. An interval-based approach to exhaustive and incremental interprocedural data-flow analysis. *ACM Transactions on Programming Languages and Systems*, 12(3): 341–395, July 1990. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/78963.html>.
- Burton:1990:TCT**
- [Bud84] Timothy A. Budd. An APL compiler for a vector processor. *ACM Transactions on Programming Languages and Systems*, 6(3):297–313, July 1984. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). F. Warren Burton. Technical correspondence: Type extension through polymorphism. *ACM Transactions on Programming Languages and Systems*, 12(1): 135–138, January 1990. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/214515.html>; <http://www.acm.org/pubs/toc/Abstracts/0164-0925/77560.html>. See [Vol91, Bur91].
- Budd:1984:ACV**

- [Bur91] **Burton:1991:TCA**
 F. Warren Burton. Technical correspondence: Author's reply to "Subtypes and Quantification", by D. M. Volpano. *ACM Transactions on Programming Languages and Systems*, 13(4):633, October 1991. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). See [Bur90b, Vol91].
- [BWP87] **Broy:1987:ADP**
 Manfred Broy, Martin Wirsing, and Peter Pepper. On the algebraic definition of programming languages. *ACM Transactions on Programming Languages and Systems*, 9(1):54-99, January 1987. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/10501.html>. [Cat80]
- [Cam89] **Cameron:1989:EHL**
 Robert D. Cameron. Efficient high-level iteration with accumulators. *ACM Transactions on Programming Languages and Systems*, 11(2):194-211, April 1989. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/63401.html>. [CB80]
- [Car95] **Carlisle:1995:TCC**
 W. H. Carlisle. Type checking concurrent I/O. *ACM Transactions on Programming Languages and Systems*, 17(3):448-460, May 1995. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/203097.html>.
- Castagna:1995:CCC**
 Giuseppe Castagna. Covariance and contravariance: Conflict without a cause. *ACM Transactions on Programming Languages and Systems*, 17(3):431-447, May 1995. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/203096.html>.
- Cattell:1980:ADC**
 R. G. G. Cattell. Automatic derivation of code generators from machine descriptions. *ACM Transactions on Programming Languages and Systems*, 2(2):173-190, April 1980. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- Casanova:1980:FSR**
 Marco R. Casanova and Phillip A. Bernstein. A formal system for reasoning about programs accessing a relational database. *ACM Transactions on Programming Languages and Systems*, 2(3):386-414, July 1980. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).

- Charron-Bost:1995:LTP**
- [CBDGF95] Bernadette Charron-Bost, Carole Delporte-Gallet, and Hugues Fauconnier. Local and temporal predicates in distributed systems. *ACM Transactions on Programming Languages and Systems*, 17(1):157–179, January 1995. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/201005.html>.
- Cotton-Barratt:2019:MVP**
- [CBMO19] Conrad Cotton-Barratt, Andrzej S. Murawski, and C.-H. Luke Ong. ML, visibly push-down class memory automata, and extended branching vector addition systems with states. *ACM Transactions on Programming Languages and Systems*, 41(2):11:1–11:??, June 2019. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL https://dl.acm.org/ft_gateway.cfm?id=3310338.
- Click:1995:CAC**
- [CC95] Cliff Click and Keith D. Cooper. Combining analyses, combining optimizations. *ACM Transactions on Programming Languages and Systems*, 17(2):181–196, March 1995. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/201061.html>.
- Clarke:1997:URE**
- [CC97] Charles L. A. Clarke and Gordon V. Cormack. On the use of regular expressions for searching text. *ACM Transactions on Programming Languages and Systems*, 19(3):413–426, May 1997. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/citations/journals/toplas/1997-19-3/p413-clarke/>.
- Chargueraud:2023:OSH**
- [CCEG23] Arthur Charguéraud, Adam Chlipala, Andres Erbsen, and Samuel Gruetter. Omnisemantics: Smooth handling of non-determinism. *ACM Transactions on Programming Languages and Systems*, 45(1):5:1–5:??, March 2023. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <https://dl.acm.org/doi/10.1145/3579834>.
- Constable:1979:HAF**
- [CD79] Robert L. Constable and James E. Donahue. A hierarchical approach to formal semantics with application to the definition of PL/CS. *ACM Transactions on Programming Languages and Systems*, 1(1):98–114, July 1979. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- Carchiolo:1989:ELT**
- [CDFP89] Vincenza Carchiolo, Antonella Di Stefano, Alberto Faro, and

- Giuseppe Pappalardo. ECCS and LIPS: Two languages for OSI systems specification and verification. *ACM Transactions on Programming Languages and Systems*, 11(2):284–329, April 1989. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/63402.html>. [CES86]
- [CDK⁺18] Hong-Yi Chen, Cristina David, Daniel Kroening, Peter Schrammel, and Björn Wachter. Bit-precise procedure-modular termination analysis. *ACM Transactions on Programming Languages and Systems*, 40(1):1:1–1:??, January 2018. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). [Chen:2018:BPP]
- [CEG07] Kevin Casey, M. Anton Ertl, and David Gregg. Optimizing indirect branch prediction accuracy in virtual machine interpreters. *ACM Transactions on Programming Languages and Systems*, 29(6):37:1–37:36, October 2007. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). [Casey:2007:OIB]
- [CEW14] Sheng Chen, Martin Erwig, and Eric Walkingshaw. Extending type inference to variational programs. *ACM Transactions on Programming Languages and Systems*, 36(1):1:1–1:??, March 2014. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). [Chen:2014:ETI]
- [CEI⁺07] Ajay Chander, David Espinosa, Nayeem Islam, Peter Lee, and George C. Necula. Enforcing resource bounds via static verification of dynamic checks. *ACM Transactions on Programming Languages and Systems*, 16(4):1097–1113, July 1994. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). [Choi:1994:SSP]
- [CF94] Jong-Deok Choi and Jeanne Ferrante. Static slicing in the presence of goto statements. *ACM Transactions on Programming Languages and Systems*, 16(4):1097–1113, July 1994. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). [Clarke:1986:AVF]
- E. M. Clarke, E. A. Emerson, and A. P. Sistla. Automatic verification of finite-state concurrent systems using temporal logic specifications. *ACM Transactions on Programming Languages and Systems*, 8(2):244–263, April 1986. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/5399.html>. An early version appeared in *Proc. 10th ACM Symposium on Principles of Programming Languages*, 1983.

- (print), 1558-4593 (electronic).
 URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/183438.html>. [CFG19]
- Cytron:1995:ECN**
- [CF95] Ron K. Cytron and Jeanne Ferrante. Efficiently computing ϕ -nodes on-the-fly. *ACM Transactions on Programming Languages and Systems*, 17(3):487–506, May 1995. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/203099.html>. [CFM94]
- Clements:2004:TRM**
- [CF04] John Clements and Matthias Felleisen. A tail-recursive machine with stack inspection. *ACM Transactions on Programming Languages and Systems*, 26(6):1029–1052, November 2004. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- Cortesi:1997:CAI**
- [CFG⁺97] Agostino Cortesi, Gilberto File, Roberto Giacobazzi, Catuscia Palamidessi, and Francesco Ranzato. Complementation in abstract interpretation. *ACM Transactions on Programming Languages and Systems*, 19(1):7–47, January 1997. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/citations/journals/toplas/1997-19-1/p7-cortesi/>. [CFP⁺04]
- Chatterjee:2019:NPW**
- Krishnendu Chatterjee, Hongfei Fu, and Amir Kafshdar Goharshady. Non-polynomial worst-case analysis of recursive programs. *ACM Transactions on Programming Languages and Systems*, 41(4):20:1–20:??, November 2019. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL https://dl.acm.org/ft_gateway.cfm?id=3339984.
- Codish:1994:SAC**
- Michael Codish, Moreno Falaschi, and Kim Marriott. Suspension analyses for concurrent logic programs. *ACM Transactions on Programming Languages and Systems*, 16(3):649–686, May 1994. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/177656.html>.
- Chatterjee:2018:AAQ**
- [CFNH18] Krishnendu Chatterjee, Hongfei Fu, Petr Novotný, and Rouzbeh Hasheminezhad. Algorithmic analysis of qualitative and quantitative termination problems for affine probabilistic programs. *ACM Transactions on Programming Languages and Systems*, 40(2):7:1–7:??, June 2018. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- Cortes:2004:HLA**
- Corinna Cortes, Kathleen Fisher. [

Daryl Pregibon, Anne Rogers, and Frederick Smith. Hancock: a language for analyzing transactional data streams. *ACM Transactions on Programming Languages and Systems*, 26(2):301–338, March 2004. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).

Cytron:1991:ECS

- [CFR+91] Ron Cytron, Jeanne Ferrante, Barry K. Rosen, Mark N. Wegman, and F. Kenneth Zadeck. Efficiently computing static single assignment form and the control dependence graph. *ACM Transactions on Programming Languages and Systems*, 13(4):451–490, October 1991. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/115320.html>.

Clark:1986:PPP

- [CG86] Keith Clark and Steve Gregory. Parlog: parallel programming in logic. *ACM Transactions on Programming Languages and Systems*, 8(1):1–49, January 1986. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/5390.html>.

Chin:1995:ROA

- [CG95] Wei-Ngan Chin and Eak-Khoon Goh. A reexamination of “Optimization of Array Subscript

Range Checks”. *ACM Transactions on Programming Languages and Systems*, 17(2):217–227, March 1995. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/201063.html>.

Christensen:2004:OPE

- [CG04] Niels H. Christensen and Robert Glück. Offline partial evaluation can be as accurate as online partial evaluation. *ACM Transactions on Programming Languages and Systems*, 26(1):191–220, January 2004. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).

Chatterjee:2019:FAD

- [CGG+19] Krishnendu Chatterjee, Amir Kafshdar Goharshady, Prateesh Goyal, Rasmus Ibsen-Jensen, and Andreas Pavlogiannis. Faster algorithms for dynamic algebraic queries in basic RSMs with constant treewidth. *ACM Transactions on Programming Languages and Systems*, 41(4):23:1–23:??, November 2019. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL https://dl.acm.org/ft_gateway.cfm?id=3363525.

Calder:1997:EBS

- [CGJ+97a] Brad Calder, Dirk Grunwald, Michael Jones, Donald Lindsay, James Martin, Michael Mozer, and Benjamin Zorn. Evidence-based static branch prediction

- using machine learning. *ACM Transactions on Programming Languages and Systems*, 19(1): 188–222, January 1997. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). [CGS⁺03]
URL <http://www.acm.org/pubs/citations/journals/toplas/1997-19-1/p188-calder/>.
- Clarke:1997:VPN**
- [CGJ97b] E. M. Clarke, O. Grumberg, and S. Jha. Verifying parameterized networks. *ACM Transactions on Programming Languages and Systems*, 19(5):726–750, September 1997. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/toplas/1997-19-5/p726-clarke/>.
- Clarke:1994:MCA**
- [CGL94] Edmund M. Clarke, Orna Grumberg, and David E. Long. Model checking and abstraction. *ACM Transactions on Programming Languages and Systems*, 16(5):1512–1542, September 1994. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). [CH87]
URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/186051.html>.
- Castagna:2009:TCW**
- [CGP09] Giuseppe Castagna, Nils Gbert, and Luca Padovani. A theory of contracts for Web services. *ACM Transactions on Programming Languages and Systems*, 31(5):19:1–19:61, June 2009. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- Choi:2003:SAS**
- Jong-Deok Choi, Manish Gupta, Mauricio J. Serrano, Vugranam C. Sreedhar, and Samuel P. Midkiff. Stack allocation and synchronization optimizations for Java using escape analysis. *ACM Transactions on Programming Languages and Systems*, 25(6): 876–910, November 2003. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- Chatterjee:1995:OEA**
- [CGST95] Siddhartha Chatterjee, John R. Gilbert, Robert Schreiber, and Shang-Hua Teng. Optimal evaluation of array expressions on massively parallel machines. *ACM Transactions on Programming Languages and Systems*, 17(1):123–156, January 1995. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/201004.html>.
- Cohen:1987:PCU**
- Jacques Cohen and Timothy J. Hickey. Parsing and compiling using Prolog. *ACM Transactions on Programming Languages and Systems*, 9(2):125–163, April 1987. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/22946.html>.

- Chow:1990:PBC**
- [CH90] Fred C. Chow and John L. Hennessy. The priority-based coloring approach to register allocation. *ACM Transactions on Programming Languages and Systems*, 12(4):501–536, October 1990. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/88621.html>.
- Charlesworth:1987:MR**
- [Cha87] Arthur Charlesworth. The multiway rendezvous. *ACM Transactions on Programming Languages and Systems*, 9(3):350–366, July 1987. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/24050.html>.
- Chatterjee:1993:CND**
- [Cha93] Siddhartha Chatterjee. Compiling nested data-parallel programs for shared-memory multiprocessors. *ACM Transactions on Programming Languages and Systems*, 15(3):400–462, July 1993. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/174152.html>.
- Charlesworth:2002:UAC**
- [Cha02] Arthur Charlesworth. The undecidability of associativity and commutativity analysis. *ACM Transactions on Programming Languages and Systems*, 24(5):554–565, September 2002. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- Chitil:2005:PPL**
- [Chi05] Olaf Chitil. Pretty printing with lazy dequeues. *ACM Transactions on Programming Languages and Systems*, 27(1):163–184, January 2005. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- Cogumbreiro:2019:DDV**
- [CHMY19] Tiago Cogumbreiro, Raymond Hu, Francisco Martins, and Nobuko Yoshida. Dynamic deadlock verification for general barrier synchronisation. *ACM Transactions on Programming Languages and Systems*, 41(1):1:1–1:??, March 2019. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL https://dl.acm.org/ft_gateway.cfm?id=3229060.
- Carbone:2012:SCC**
- [CHY12] Marco Carbone, Kohei Honda, and Nobuko Yoshida. Structured communication-centered programming for Web services. *ACM Transactions on Programming Languages and Systems*, 34(2):8:1–8:78, June 2012. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).

- [CI84] **Cameron:1984:GBD**
Robert D. Cameron and M. Robert Ito. Grammar-based definition of metaprogramming systems. *ACM Transactions on Programming Languages and Systems*, 6(1):20–54, January 1984. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [CIJGP18] **Chatterjee:2018:AAP**
Krishnendu Chatterjee, Rasmus Ibsen-Jensen, Amir Kafshdar Goharshady, and Andreas Pavlogiannis. Algorithms for algebraic path properties in concurrent systems of constant treewidth components. *ACM Transactions on Programming Languages and Systems*, 40(3):9:1–9:??, August 2018. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [CJK95] **Cejtin:1995:HOD**
Henry Cejtin, Suresh Jagannathan, and Richard Kelsey. Higher-order distributed objects. *ACM Transactions on Programming Languages and Systems*, 17(5):704–739, September 1995. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/213986.html>.
- [CK93] **Consel:1993:PPE**
Charles Consel and Siau Cheng Khoo. Parameterized partial evaluation. *ACM Transactions on Programming Languages and Systems*, 15(3):463–493, July 1993. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/174155.html>.
- [CK94] **Carr:1994:IRM**
S. Carr and K. Kennedy. Improving the ratio of memory operations in floating-point operations in loops. *ACM Transactions on Programming Languages and Systems*, 16(6):1768–1810, November 1994. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/197366.html>.
- [CKT86] **Cooper:1986:IIA**
Keith D. Cooper, Ken Kennedy, and Linda Torczon. The impact of interprocedural analysis and optimizations in the R(n) programming environment. *ACM Transactions on Programming Languages and Systems*, 8(4):491–523, October 1986. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/6489.html>.
- [CL94] **Crowl:1994:PPC**
Lawrence A. Crowl and Thomas J. LeBlanc. Parallel programming with control abstraction. *ACM Transactions on Programming Languages and Systems*, 16(3):524–576, May 1994. CO-

- DEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/177584.html>.
- Chambers:1995:TMM**
- [CL95] Craig Chambers and Gary T. Leavens. Typechecking and modules for multimethods. *ACM Transactions on Programming Languages and Systems*, 17(6): 805–843, November 1995. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/218571.html>. [CM86b]
- Clarke:1980:SRI**
- [Cla80] Edmund Melson Clarke, Jr. Synthesis of resource invariants for concurrent programs. *ACM Transactions on Programming Languages and Systems*, 2(3): 338–358, July 1980. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). [CM93]
- Chandy:1984:DPP**
- [CM84] K. M. Chandy and Jayadev Misra. The drinking philosopher’s problem. *ACM Transactions on Programming Languages and Systems*, 6(4):632–646, October 1984. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- Chandy:1986:ESR**
- [CM86a] K. M. Chandy and Jayadev Misra. An example of stepwise refinement of distributed programs: Quiescence detection. *ACM Transactions on Programming Languages and Systems*, 8(3):326–343, July 1986. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/5958.html>.
- Chirica:1986:TCI**
- Laurian M. Chirica and David F. Martin. Toward compiler implementation correctness proofs. *ACM Transactions on Programming Languages and Systems*, 8(2):185–214, April 1986. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/30847.html>.
- Copperman:1993:TCF**
- Max Copperman and Charles E. McDowell. Technical correspondence: a further note on Hennessy’s “Symbolic Debugging of Optimized Code”. *ACM Transactions on Programming Languages and Systems*, 15(2): 357–365, April 1993. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/214526.html>. See [Hen82].
- Codish:1995:IAI**
- [CMB⁺95] Michael Codish, Anne Mulkers, Maurice Bruynooghe, Maria Garcia de la Banda, and Manuel Hermenegildo. Improving abstract interpretations by com-

- binning domains. *ACM Transactions on Programming Languages and Systems*, 17(1):28–44, January 1995. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/200998.html>. [CN83]
- [CMLC06] Curtis Clifton, Todd Millstein, Gary T. Leavens, and Craig Chambers. MultiJava: Design rationale, compiler implementation, and applications. *ACM Transactions on Programming Languages and Systems*, 28(3):517–575, May 2006. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). [CO90]
- [CMN91] Jong-Deok Choi, Barton P. Miller, and Robert H. B. Netzer. Techniques for debugging parallel programs with flow-back analysis. *ACM Transactions on Programming Languages and Systems*, 13(4):491–530, October 1991. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/115324.html>. [COE⁺20]
- [CMS03] Aske Simon Christensen, Anders Møller, and Michael I. Schwartzbach. Extending Java for high-level Web service construction. *ACM Transactions on Programming Languages and Systems*, 25(6):814–875, November 2003. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [Cohen:1983:CCA] Jacques Cohen and Alexandru Nicolau. Comparison of compacting algorithms for garbage collection. *ACM Transactions on Programming Languages and Systems*, 5(4):532–553, October 1983. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [Clemm:1990:MEI] Geoffrey Clemm and Leon Osterweil. A mechanism for environment integration. *ACM Transactions on Programming Languages and Systems*, 12(1):1–25, January 1990. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/77607.html>.
- [Coblenz:2020:OTA] Michael Coblenz, Reed Oei, Tyler Etzel, Paulette Koronkevich, Miles Baker, Yannick Bloem, Brad A. Myers, Joshua Sunshine, and Jonathan Aldrich. Obsidian: Typestate and assets for safer blockchain programming. *ACM Transactions on Programming Languages and Systems*, 42(3):14:1–14:82, December 2020. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (elec-

- tronic). URL <https://dl.acm.org/doi/10.1145/3417516>.
- [Coh83] Norman H. Cohen. Eliminating redundant recursive calls. *ACM Transactions on Programming Languages and Systems*, 5(3):265–299, July 1983. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [Coh85] Norman H. Cohen. A note on Cohen’s “Eliminating Redundant Recursive Calls”. *ACM Transactions on Programming Languages and Systems*, 7(4):680–685, October 1985. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/215006.html>.
- [Coh91] Norman H. Cohen. Technical correspondence: Type-extension type tests can be performed in constant time. *ACM Transactions on Programming Languages and Systems*, 13(4):626–629, October 1991. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/115297.html>. See [Wir88, Wir91].
- [Col84] L. Colussi. Recursion as an effective step in program development. *ACM Transactions on Programming Languages and Systems*, 6(1):55–67, January 1984. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [Com80] Douglas Comer. A note on median split trees. *ACM Transactions on Programming Languages and Systems*, 2(1):129–133, January 1980. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [Cop94] Max Copperman. Debugging optimized code without being misled. *ACM Transactions on Programming Languages and Systems*, 16(3):387–427, May 1994. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/177517.html>.
- [CP95] Alan Carle and Lori Pollock. Matching-based incremental evaluators for hierarchical attribute grammar dialects. *ACM Transactions on Programming Languages and Systems*, 17(2):394–429, March 1995. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/201071.html>.

Cohen:1983:ERR

Comer:1980:NMS

Cohen:1985:NCE

Copperman:1994:DOC

Cohen:1991:TCT

Carle:1995:MBI

Colussi:1984:RES

- [CP96] **Carle:1996:OCP**
 Alan Carle and Lori Pollock. On the optimality of change propagation for incremental evaluation of hierarchical attribute grammars. *ACM Transactions on Programming Languages and Systems*, 18(1):16–29, January 1996. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/225542.html>.
- [CP17] **Cohen:2017:LPC**
 Nachshon Cohen and Erez Petrank. Limitations of partial compaction: Towards practical bounds. *ACM Transactions on Programming Languages and Systems*, 39(1):2:1–2:??, March 2017. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [CPRT02] **Corchuelo:2002:RSE**
 Rafael Corchuelo, José A. Pérez, Antonio Ruiz, and Miguel Toro. Repairing syntax errors in LR parsers. *ACM Transactions on Programming Languages and Systems*, 24(6):698–710, November 2002. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [CPS93] **Cleaveland:1993:CWS**
 Rance Cleaveland, Joachim Parrow, and Bernhard Steffen. The Concurrency Workbench: a semantics-based tool for the verification of concurrent systems. *ACM Transactions on Programming Languages and Systems*, 15(1):36–72, January 1993. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/151648.html>.
- [CR87] **Carson:1987:GSP**
 Scott D. Carson and Paul F. Reynolds, Jr. The geometry of semaphore programs. *ACM Transactions on Programming Languages and Systems*, 9(1):25–53, January 1987. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/9759.html>.
- [CRN+08] **Cooke:2008:NTD**
 Daniel E. Cooke, J. Nelson Rushton, Brad Nemanich, Robert G. Watson, and Per Andersen. Normalize, transpose, and distribute: an automatic approach for handling nonscalars. *ACM Transactions on Programming Languages and Systems*, 30(2):9:1–9:49, March 2008. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [CS87] **Cuny:1987:CDD**
 Janice E. Cuny and Lawrence Snyder. Conversion from data-driven to synchronous execution in loop programs. *ACM Transactions on Programming Languages and Systems*, 9(4):599–617, October 1987. CODEN ATPSDT. ISSN 0164-0925

- (print), 1558-4593 (electronic).
 URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/31334.html>.
- [CS95] Manhoi Choy and Ambuj K. Singh. Efficient fault-tolerant algorithms for distributed resource allocation. *ACM Transactions on Programming Languages and Systems*, 17(3):535–559, May 1995. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/203101.html>.
- [CSS99] **Choy:1995:EFT** Michael Codish, Harald Søndergaard, and Peter J. Stuckey. Sharing and groundness dependencies in logic programs. *ACM Transactions on Programming Languages and Systems*, 21(5):948–976, September 1999. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/articles/journals/toplas/1999-21-5/p948-codish/p948-codish.pdf>; <http://www.acm.org/pubs/citations/journals/toplas/1999-21-5/p948-codish/>.
- [CS04] **Chen:2004:LGS** Yifeng Chen and J. W. Sanders. Logic of global synchrony. *ACM Transactions on Programming Languages and Systems*, 26(2):221–262, March 2004. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [CSCM00] **Clausen:2000:JBC** Lars Ræder Clausen, Ulrik Pagh Schultz, Charles Consel, and Gilles Muller. Java bytecode compression for low-end embedded systems. *ACM Transactions on Programming Languages and Systems*, 22(3):471–489, 2000. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/articles/journals/toplas/2000-22-3/p471-clausen/p471-clausen.pdf>; <http://www.acm.org/pubs/citations/journals/toplas/2000-22-3/p471-clausen/>.
- [CSV01] **Cooper:2001:OSR** Keith D. Cooper, L. Taylor Simpson, and Christopher A. Vick. Operator strength reduction. *ACM Transactions on Programming Languages and Systems*, 23(5):603–625, September 2001. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [CSW06] **Carlsson:2006:MAC** Richard Carlsson, Konstantinos Sagonas, and Jesper Wilhelmsen. Message analysis for concurrent programs using message passing. *ACM Transactions on Programming Languages and Systems*, 28(4):715–746, July 2006. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).

- [CTT07] Christian S. Collberg, Clark Thomborson, and Gregg M. Townsend. Dynamic graph-based software fingerprinting. *ACM Transactions on Programming Languages and Systems*, 29(6):35:1–35:67, October 2007. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [Dan23] Olivier Danvy. The tortoise and the hare algorithm for finite lists, compositionally. *ACM Transactions on Programming Languages and Systems*, 45(1):1:1–1:??, March 2023. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <https://dl.acm.org/doi/10.1145/3564619>.
- [CU08] James Cheney and Christian Urban. Nominal logic programming. *ACM Transactions on Programming Languages and Systems*, 30(5):26:1–26:47, August 2008. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [Dar90] Jared L. Darlington. Search direction by goal failure in goal-oriented programming. *ACM Transactions on Programming Languages and Systems*, 12(2):224–252, April 1990. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/78946.html>.
- [CZ84] Robert L. Constable and Daniel R. Zlatin. The type theory of PL/CV3. *ACM Transactions on Programming Languages and Systems*, 6(1):94–117, January 1984. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [DAS98] Eric Dujardin, Eric Amiel, and Eric Simon. Fast algorithms for compressed multimethod dispatch table generation. *ACM Transactions on Programming Languages and Systems*, 20(1):116–165, January 1998. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/toplas/1998-20-1/p116-dujardin/>.
- [Dam03] Ferruccio Damiani. Rank 2 intersection types for local definitions and conditional expressions. *ACM Transactions on Programming Languages and Systems*, 25(4):401–451, July 2003. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [DAW88] Laura K. Dillon, George S. Avrunin, and Jack C. Wile-

Collberg:2007:DGB**Danvy:2023:THA****Cheney:2008:NLP****Darlington:1990:SDG****Constable:1984:TTP****Dujardin:1998:FAC****Damiani:2003:RIT****Dillon:1988:CET**

- don. Constrained expressions: Toward broad applicability of analysis methods for distributed software systems. *ACM Transactions on Programming Languages and Systems*, 10(3):374–402, July 1988. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/44502.html>. [DC22]
- [DB85] Douglas D. Dunlop and Victor R. Basili. Generalizing specifications for uniformly implemented loops. *ACM Transactions on Programming Languages and Systems*, 7(1):137–158, January 1985. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/2708.html>. [DD85]
- [dBB85] Arie de Bruin and Wim Böhm. The denotational semantics of dynamic networks of processes. *ACM Transactions on Programming Languages and Systems*, 7(4):656–679, October 1985. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/4473.html>. [DDD05]
- [dBH21] Frank S. de Boer and Hans-Dieter A. Hiep. Completeness and complexity of reasoning about call-by-value in Hoare logic. *ACM Transactions on Programming Languages and Systems*, 43(4):17:1–17:35, December 2021. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <https://dl.acm.org/doi/10.1145/3477143>. **Deng:2022:SDR**
- Chaoqiang Deng and Patrick Cousot. The systematic design of responsibility analysis by abstract interpretation. *ACM Transactions on Programming Languages and Systems*, 44(1):3:1–3:90, March 2022. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <https://dl.acm.org/doi/10.1145/3484938>. **Donahue:1985:DTV**
- James Donahue and Alan Demers. Data types are values. *ACM Transactions on Programming Languages and Systems*, 7(3):426–445, July 1985. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/3987.html>. **DeSutter:2005:LTB**
- Bjorn De Sutter, Bruno De Bus, and Koen De Bosschere. Link-time binary rewriting techniques for program compaction. *ACM Transactions on Programming Languages and Systems*, 27(5):882–945, September 2005. CO-

DEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).

Drossopoulou:2002:MDO

- [DDDCG02] Sophia Drossopoulou, Ferruccio Damiani, Mariangiola Dezani-Ciancaglini, and Paola Gianini. More dynamic object reclassification: *Fickle*_{||}. *ACM Transactions on Programming Languages and Systems*, 24(2):153–191, March 2002. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).

Dencker:1984:OPT

- [DDH84] Peter Dencker, Karl Dürre, and Johannes Heuft. Optimization of parser tables for portable compilers. *ACM Transactions on Programming Languages and Systems*, 6(4):546–572, October 1984. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).

Dietl:2011:SOT

- [DDM11] Werner Dietl, Sophia Drossopoulou, and Peter Müller. Separating ownership topology and encapsulation with generic universe types. *ACM Transactions on Programming Languages and Systems*, 33(6):20:1–20:62, December 2011. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).

Das:2022:NST

- [DDMP22] Ankush Das, Henry Deyoung, Andreia Mordido, and Frank Pfenning. Nested session types.

ACM Transactions on Programming Languages and Systems, 44(3):19:1–19:45, September 2022. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <https://dl.acm.org/doi/10.1145/3539656>.

Decorte:1999:CBT

- [DDV99] Stefaan Decorte, Danny De Schreye, and Henk Vandecasteele. Constraint-based termination analysis of logic programs. *ACM Transactions on Programming Languages and Systems*, 21(6):1137–1195, November 1999. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/citations/journals/toplas/1999-21-6/p1137-decorte/>.

Debray:1989:SIM

- [Deb89] Saumya K. Debray. Static inference of modes and data dependencies in logic programs. *ACM Transactions on Programming Languages and Systems*, 11(3):418–450, July 1989. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/65983.html>.

Debray:1995:CDA

- [Deb95] Saumya K. Debray. On the complexity of dataflow analysis of logic programs. *ACM Transactions on Programming Languages and Systems*, 17(2):331–365, March 1995. CODEN ATPSDT. ISSN 0164-0925

- (print), 1558-4593 (electronic).
 URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/201068.html>.
- DeMillo:1983:GEI**
- [DeM83] Richard A. DeMillo. Guest Editor's introduction. *ACM Transactions on Programming Languages and Systems*, 5(3):355, July 1983. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). [DF80]
- Debray:2000:CTC**
- [DEMD00] Saumya K. Debray, William Evans, Robert Muth, and Bjorn De Sutter. Compiler techniques for code compaction. *ACM Transactions on Programming Languages and Systems*, 22(2):378–415, March 2000. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/citations/journals/toplas/2000-22-2/p378-debray/>. [DF81]
- Dershowitz:1985:PAI**
- [Der85] Nachum Dershowitz. Program abstraction and instantiation. *ACM Transactions on Programming Languages and Systems*, 7(3):446–477, July 1985. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/3986.html>. [DF84]
- DeFraine:2012:EAC**
- [DES12] Bruno De Fraine, Erik Ernst, and Mario Südholt. Essential AOP: The A calculus. *ACM Transactions on Programming Languages and Systems*, 34(3):12:1–12:43, October 2012. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- Davidson:1980:DAR**
- Jack W. Davidson and Christopher W. Fraser. The design and application of a re-targetable peephole optimizer. *ACM Transactions on Programming Languages and Systems*, 2(2):191–202, April 1980. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). See also corrigendum [DF81].
- Davidson:1981:CDA**
- Jack W. Davidson and Christopher W. Fraser. Corrigendum: “The Design and Application of a Retargetable Peephole Optimizer”. *ACM Transactions on Programming Languages and Systems*, 3(1):110, January 1981. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). See [DF80].
- Davidson:1984:CST**
- Jack W. Davidson and Christopher W. Fraser. Code selection through object code optimization. *ACM Transactions on Programming Languages and Systems*, 6(4):505–526, October 1984. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).

- Douence:1998:SSF**
- [DF98] Rémi Douence and Pascal Fradet. A systematic study of functional language implementations. *ACM Transactions on Programming Languages and Systems*, 20(2):344–387, March 1998. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/toplas/1998-20-2/p344-douence/>.
- Dimoulas:2011:CSH**
- [DF11] Christos Dimoulas and Matthias Felleisen. On contract satisfaction in a higher-order world. *ACM Transactions on Programming Languages and Systems*, 33(5):16:1–16:29, November 2011. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- Demetrescu:2015:RIP**
- [DFR15] Camil Demetrescu, Irene Finocchi, and Andrea Ribichini. Reactive imperative programming with dataflow constraints. *ACM Transactions on Programming Languages and Systems*, 37(1):3:1–3:??, January 2015. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- DalLago:2019:PTM**
- [DG19] Ugo Dal Lago and Charles Grellois. Probabilistic termination by monadic affine sized typing. *ACM Transactions on Programming Languages and Systems*, 41(2):10:1–10:??, June 2019. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL https://dl.acm.org/ft_gateway.cfm?id=3293605.
- Dams:1997:AIR**
- [DGG97] Dennis Dams, Rob Gerth, and Orna Grumberg. Abstract interpretation of reactive systems. *ACM Transactions on Programming Languages and Systems*, 19(2):253–291, March 1997. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/citations/journals/toplas/1997-19-2/p253-dams/>.
- Dewar:1979:PRE**
- [DGL+79] Robert B. K. Dewar, Arthur Grand, Ssu-Cheng Liu, Jacob T. Schwartz, and Edmond Schonberg. Programming by refinement, as exemplified by the SETL representation sublanguage. *ACM Transactions on Programming Languages and Systems*, 1(1):27–49, July 1979. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- DeBoer:1997:PCC**
- [DGMP97] Frank S. De Boer, Maurizio Gabbrielli, Elena Marchiori, and Catuscia Palamidessi. Proving concurrent constraint programs correct. *ACM Transactions on Programming Languages and Systems*, 19(5):685–725, September 1997. CODEN ATPSDT. ISSN 0164-

0925 (print), 1558-4593 (electronic). URL http://www.acm.org:80/pubs/citations/journals/toplas/1997-19-5/p685-de_boer/.

Duesterwald:1997:PFD

- [DGS97] Evelyn Duesterwald, Rajiv Gupta, and Mary Lou Soffa. A practical framework for demand-driven interprocedural data flow analysis. *ACM Transactions on Programming Languages and Systems*, 19(6):992–1030, November 1997. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/toplas/1997-19-6/p992-duesterwald/>.

Dhamdhere:1991:PAG

- [Dha91] Dhananjay M. Dhamdhere. Practical adaptation of the global optimization algorithm of Morel and Renvoise. *ACM Transactions on Programming Languages and Systems*, 13(2):291–294, April 1991. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/103161.html>; <http://www.acm.org/pubs/toc/Abstracts/0164-0925/214520.html>.

delaBanda:1996:GAC

- [dHB⁺96] M. Garcia de la Banda, M. Hermenegildo, M. Bruynooghe, V. Dumortier, G. Janssens, and W. Simoens. Global analysis of

constraint logic programs. *ACM Transactions on Programming Languages and Systems*, 18(5):564–614, September 1996. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/toplas/232734.html>.

DeLaBanda:2000:ICL

- [DHM00] Marí García De La Banda, Manuel Hermengildo, and Kim Marriott. Independence in CLP languages. *ACM Transactions on Programming Languages and Systems*, 22(2):296–339, March 2000. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL http://www.acm.org/pubs/citations/journals/toplas/2000-22-2/p296-garcia_de_la_banda/.

Dolby:2012:DCA

- [DHM⁺12] Julian Dolby, Christian Hammer, Daniel Marino, Frank Tip, Mandana Vaziri, and Jan Vitek. A data-centric approach to synchronization. *ACM Transactions on Programming Languages and Systems*, 34(1):4:1–4:48, April 2012. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).

Dolev:2009:SSP

- [DHS09] Shlomi Dolev, Yinnon Haviv, and Mooly Sagiv. Self-stabilization preserving compiler. *ACM Transactions on Programming Languages and*

Systems, 31(6):22:1–22:22, August 2009. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).

DeMoura:2009:RC

- [DI09] Ana Lúcia De Moura and Roberto Ierusalimsky. Revisiting coroutines. *ACM Transactions on Programming Languages and Systems*, 31(2):6:1–6:31, February 2009. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).

Dillon:1990:USE

- [Dil90] Laura K. Dillon. Using symbolic execution for verification of Ada tasking programs. *ACM Transactions on Programming Languages and Systems*, 12(4):643–669, October 1990. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/96551.html>.

deJonge:2012:NFE

- [dJKVS12] Maartje de Jonge, Lennart C. L. Kats, Eelco Visser, and Emma Söderberg. Natural and flexible error recovery for generated modular language environments. *ACM Transactions on Programming Languages and Systems*, 34(4):15:1–15:50, December 2012. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).

Dodds:2016:VCS

- [DJP+16] Mike Dodds, Suresh Jagan-

nathan, Matthew J. Parkinson, Kasper Svendsen, and Lars Birkedal. Verifying custom synchronization constructs using higher-order separation logic. *ACM Transactions on Programming Languages and Systems*, 38(2):4:1–4:??, January 2016. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).

Darulova:2017:TCR

- [DK17] Eva Darulova and Viktor Kuncak. Towards a compiler for reals. *ACM Transactions on Programming Languages and Systems*, 39(2):8:1–8:??, May 2017. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).

David:2018:PSP

- [DKKL18] Cristina David, Pascal Kesseli, Daniel Kroening, and Matt Lewis. Program synthesis for program analysis. *ACM Transactions on Programming Languages and Systems*, 40(2):5:1–5:??, June 2018. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).

Drinic:2007:PPC

- [DKV07] Milenko Drinić, Darko Kirovski, and Hoi Vo. PPMexe: Program compression. *ACM Transactions on Programming Languages and Systems*, 29(1):3:1–3:31, January 2007. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).

- [DL93] **Debray:1993:CAL**
 Saumya K. Debray and Nai-Wei Lin. Cost analysis of logic programs. *ACM Transactions on Programming Languages and Systems*, 15(5):826–875, November 1993. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/161472.html>. [DMM01]
- [DL18] **Danicic:2018:SBS**
 Sebastian Danicic and Michael R. Laurence. Static backward slicing of non-deterministic programs and systems. *ACM Transactions on Programming Languages and Systems*, 40(3):11:1–11:??, August 2018. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). See Editor’s foreword [Mye18]. [DMP96]
- [DLR16] **Dissegna:2016:AIB**
 Stefano Dissegna, Francesco Logozzo, and Francesco Ranzato. An abstract interpretation-based model of tracing just-in-time compilation. *ACM Transactions on Programming Languages and Systems*, 38(2):7:1–7:??, January 2016. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). [DNS+06]
- [DMM88] **Degano:1988:EIL**
 Pierpaolo Degano, Stefano Manucchi, and Bruno Mojana. Efficient incremental LR parsing for syntax-directed editors. *ACM Transactions on Programming Languages and Systems*, 10(3):345–373, July 1988. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/214503.html>. [Diwan:2001:UTA]
- [DMP96] **Diwan:2001:UTA**
 Amer Diwan, Kathryn S. McKinley, and J. Eliot B. Moss. Using types to analyze and optimize object-oriented programs. *ACM Transactions on Programming Languages and Systems*, 23(1):30–72, January 2001. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). [Danvy:1996:EED]
- [DMP96] **Danvy:1996:EED**
 Olivier Danvy, Karoline Malmkjær, and Jens Palsberg. Eta-expansion does the trick. *ACM Transactions on Programming Languages and Systems*, 18(6):730–751, November 1996. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/toplas/235831.html>; <http://www.acm.org/pubs/toc/Abstracts/toplas/236119.html>. [Ducasse:2006:TMF]
- [DNS+06] **Ducasse:2006:TMF**
 Stéphane Ducasse, Oscar Nierstrasz, Nathanael Schärli, Roel Wuyts, and Andrew P. Black. Traits: a mechanism for fine-grained reuse. *ACM Transactions on Programming Languages and Systems*, 28(2):331–388, March 2006. CODEN

- ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [DP82] Frank DeRemer and Thomas Pennello. Efficient computation of LALR(1) look-ahead sets. *ACM Transactions on Programming Languages and Systems*, 4(4):615–649, October 1982. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [DP93] Dhananjay M. Dhamdhare and Harish Patil. An elimination algorithm for bidirectional data flow problems using edge placement. *ACM Transactions on Programming Languages and Systems*, 15(2):312–336, April 1993. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/169684.html>.
- [DP97] Saumya K. Debray and Todd A. Proebsting. Interprocedural control flow analysis of first-order programs with tail-call optimization. *ACM Transactions on Programming Languages and Systems*, 19(4):568–585, July 1997. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/toplas/1997-19-4/p568-debray/>.
- [DP99] Luiz De Rose and David Padua. Techniques for the translation of MATLAB programs into Fortran 90. *ACM Transactions on Programming Languages and Systems*, 21(2):286–323, March 1999. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL http://www.acm.org/pubs/citations/journals/toplas/1999-21-2/p286-de_rose/.
- [DPP22] Dominique Devriese, Marco Patrignani, and Frank Piessens. Two parametricities versus three universal types. *ACM Transactions on Programming Languages and Systems*, 44(4):23:1–23:??, December 2022. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <https://dl.acm.org/doi/10.1145/3539657>.
- [DPPR00] Agostino Dovier, Carla Piazza, Enrico Pontelli, and Gianfranco Rossi. Sets and constraint logic programming. *ACM Transactions on Programming Languages and Systems*, 22(5):861–931, 2000. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/articles/journals/toplas/2000-22-5/p861-dovier/p861-dovier.pdf>; <http://www.acm.org/pubs/citations/journals/toplas/2000-22-5/p861-dovier/>.

- Das:2005:PFI**
- [DR05] Dibyendu Das and U. Ramakrishna. A practical and fast iterative algorithm for ϕ -function computation using DJ graphs. *ACM Transactions on Programming Languages and Systems*, 27(3):426–440, May 2005. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- Dawson:1996:PPU**
- [DRSS96] Steven Dawson, C. R. Ramakrishnan, Steven Skiena, and Terrance Swift. Principles and practice of unification factoring. *ACM Transactions on Programming Languages and Systems*, 18(5):528–563, September 1996. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/232722.html>; <http://www.acm.org/pubs/toc/Abstracts/toplas/232722.html>; <http://www.acm.org/pubs/toc/Abstracts/toplas/235455.html>.
- Dekel:1983:PGP**
- [DS83] Eliezer Dekel and Sartaj Sahni. Parallel generation of postfix and tree forms. *ACM Transactions on Programming Languages and Systems*, 5(3):300–317, July 1983. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- Drechsler:1988:TCS**
- [DS88] Karl-Heinz Drechsler and Manfred P. Stadel. Technical correspondence: a solution to a problem with Morel and Renvoise’s “Global Optimization by Suppression of Partial Redundancies”. *ACM Transactions on Programming Languages and Systems*, 10(4):635–640, October 1988. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/214509.html>. See remark [Sor89].
- Dewan:1990:ASA**
- [DS90] Prasun Dewan and Marvin Solomon. An approach to support automatic generation of user interfaces. *ACM Transactions on Programming Languages and Systems*, 12(4):566–609, October 1990. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/214518.html>.
- Dhamdhere:1998:DCD**
- [DS98] D. M. Dhamdhere and K. V. Sankaranarayanan. Dynamic currency determination in optimized programs. *ACM Transactions on Programming Languages and Systems*, 20(6):1111–1130, November 1998. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/toplas/1998-20-6/p1111-dhamdhere/>.

DOsualdo:2021:TLC

- [DSFG21] Emanuele D’Osualdo, Julian Sutherland, Azadeh Farzan, and Philippa Gardner. TaDA live: Compositional reasoning for termination of fine-grained concurrent programs. *ACM Transactions on Programming Languages and Systems*, 43(4):16:1–16:134, December 2021. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <https://dl.acm.org/doi/10.1145/3477082>.

Dewar:1982:TDG

- [DSW82] Robert B. K. Dewar, Micha Sharir, and Elia Weixelbaum. Transformational derivation of a garbage collection algorithm. *ACM Transactions on Programming Languages and Systems*, 4(4):650–667, October 1982. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).

Derrick:2011:MVP

- [DSW11] John Derrick, Gerhard Schellhorn, and Heike Wehrheim. Mechanically verified proof obligations for linearizability. *ACM Transactions on Programming Languages and Systems*, 33(1):4:1–4:43, January 2011. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).

Ducournau:2008:PHA

- [Duc08] Roland Ducournau. Perfect hashing as an almost perfect subtype test. *ACM Transactions on Programming Languages and*

Systems, 30(6):33:1–33:56, October 2008. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).

Duggan:1999:DTD

- [Dug99] Dominic Duggan. Dynamic typing for distributed programming in polymorphic languages. *ACM Transactions on Programming Languages and Systems*, 21(1):11–45, January 1999. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/citations/journals/toplas/1999-21-1/p11-duggan/>.

Duggan:2002:TSL

- [Dug02] Dominic Duggan. Type-safe linking with recursive DLLs and shared libraries. *ACM Transactions on Programming Languages and Systems*, 24(6):711–804, November 2002. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).

DeSutter:2007:PID

- [DVD07] Bjorn De Sutter, Ludo Van Put, and Koen De Bosschere. A practical interprocedural dominance algorithm. *ACM Transactions on Programming Languages and Systems*, 29(4):19:1–19:44, August 2007. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).

Dantoni:2015:FTB

- [DVL15] Loris D’antoni, Margus Veanes, Benjamin Livshits, and David

- Molnar. Fast: a transducer-based language for tree manipulation. *ACM Transactions on Programming Languages and Systems*, 38(1):1:1–1:??, October 2015. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). [EGP14]
- [DW89] Saumya K. Debray and David S. Warren. Functional computations in logic programs. *ACM Transactions on Programming Languages and Systems*, 11(3):451–481, July 1989. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/65984.html>. [Ell82]
- [DWWW08] Daniel S. Dantas, David Walker, Geoffrey Washburn, and Stephanie Weirich. AspectML: a polymorphic aspect-oriented functional programming language. *ACM Transactions on Programming Languages and Systems*, 30(3):14:1–14:60, May 2008. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). [ELS⁺14]
- [EGM01] Sandro Etalle, Maurizio Gabrielli, and Maria Chiara Meo. Transformations of CCP programs. *ACM Transactions on Programming Languages and Systems*, 23(3):304–395, May 2001. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). [EMH20]
- [Esparza:2014:PBV] Javier Esparza, Pierre Ganty, and Tomás Poch. Pattern-based verification for multi-threaded programs. *ACM Transactions on Programming Languages and Systems*, 36(3):9:1–9:??, September 2014. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [Ellis:1982:TCS] John R. Ellis. Technical correspondence: On Steensgaard-Madsen’s “A Statement-Oriented Approach to Data Abstraction”. *ACM Transactions on Programming Languages and Systems*, 4(1):120–122, January 1982. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). See [SM81, SM82].
- [Elder:2014:ADA] Matt Elder, Junghee Lim, Tushar Sharma, Tycho Andersen, and Thomas Reps. Abstract domains of affine relations. *ACM Transactions on Programming Languages and Systems*, 36(4):11:1–11:??, October 2014. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [Eilers:2020:MPP] Marco Eilers, Peter Müller, and Samuel Hitz. Modular product programs. *ACM Transactions on Programming Languages and Systems*, 42(1):3:1–3:??, January 2020. CODEN ATPSDT. ISSN 0164-0925

(print), 1558-4593 (electronic).
URL https://dl.acm.org/ft_gateway.cfm?id=3324783.

Ernst:1980:SAD

- [EO80] George W. Ernst and William F. Ogden. Specification of abstract data types in Modula. *ACM Transactions on Programming Languages and Systems*, 2(4):522–543, October 1980. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).

Emerson:1997:USW

- [ES97] E. A. Emerson and A. P. Sistla. Utilizing symmetry when model-checking under fairness assumptions: An automata-theoretic approach. *ACM Transactions on Programming Languages and Systems*, 19(4):617–638, July 1997. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/toplas/1997-19-4/p617-emerson/>.

Eugster:2007:TBP

- [Eug07] Patrick Eugster. Type-based publish/subscribe: Concepts and experiences. *ACM Transactions on Programming Languages and Systems*, 29(1):6:1–6:50, January 2007. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).

Finlay:1993:TCC

- [FA93] Alan Finlay and Lloyd Allison. Technical correspondence: a correction to the denotational se-

mantics for the Prolog of Nicholson and Foo. *ACM Transactions on Programming Languages and Systems*, 15(1):206–208, January 1993. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/151652.html>. See [NF89].

Fateman:1982:HLL

- [Fat82] Richard J. Fateman. High-level language implications of the proposed IEEE floating-point standard. *ACM Transactions on Programming Languages and Systems*, 4(2):239–257, April 1982. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).

Feng:2012:BQP

- [FDY12] Yuan Feng, Runyao Duan, and Mingsheng Ying. Bisimulation for quantum processes. *ACM Transactions on Programming Languages and Systems*, 34(4):17:1–17:43, December 2012. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).

Feather:1982:SAP

- [Fea82] Martin S. Feather. A system for assisting program transformation. *ACM Transactions on Programming Languages and Systems*, 4(1):1–20, January 1982. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).

- [Fea87] **Feather:1987:LSS**
 Martin S. Feather. Language support for the specification and development of composite systems. *ACM Transactions on Programming Languages and Systems*, 9(2):198–234, April 1987. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/22947.html>. [FFLQ08]
- [FF99] **Flanagan:1999:CSB**
 Cormac Flanagan and Matthias Felleisen. Componential set-based analysis. *ACM Transactions on Programming Languages and Systems*, 21(2):370–416, March 1999. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/citations/journals/toplas/1999-21-2/p370-flanagan/>. [FGL03]
- [FF08] **Furr:2008:CTS**
 Michael Furr and Jeffrey S. Foster. Checking type safety of foreign function calls. *ACM Transactions on Programming Languages and Systems*, 30(4):18:1–18:63, July 2008. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). [FGL94]
- [FFF⁺18] **Florence:2018:PPP**
 Spencer P. Florence, Burke Fetscher, Matthew Flatt, William H. Temps, Vincent St-Amour, 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 Transactions on Programming Languages and Systems*, 40(3):10:1–10:??, August 2018. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- Flanagan:2008:TAS**
 Cormac Flanagan, Stephen N. Freund, Marina Lifshin, and Shaz Qadeer. Types for atomicity: Static checking and inference for Java. *ACM Transactions on Programming Languages and Systems*, 30(4):20:1–20:52, July 2008. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- Fournet:2003:SIT**
 Cedric Fournet and Andrew D. Gordon. Stack inspection: Theory and variants. *ACM Transactions on Programming Languages and Systems*, 25(3):360–399, May 2003. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- Freudenberger:1994:ASC**
 Stefan Freudenberger, Thomas R. Gross, and P. Geoffrey Lowney. Avoidance and suppression of compensation code in a trace scheduling compiler. *ACM Transactions on Programming Languages and Systems*, 16(4):1156–1214, July 1994. CODEN ATPSDT. ISSN 0164-0925

(print), 1558-4593 (electronic).
 URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/183446.html>.

Foster:2007:CBT

- [FGM⁺07a] J. Nathan Foster, Michael B. Greenwald, Jonathan T. Moore, Benjamin C. Pierce, and Alan Schmitt. Combinators for bidirectional tree transformations: a linguistic approach to the view-update problem. *ACM Transactions on Programming Languages and Systems*, 29(3):17:1–17:65, May 2007. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).

Fournet:2007:TDA

- [FGM07b] Cédric Fournet, Andrew D. Gordon, and Sergio Maffei. A type discipline for authorization policies. *ACM Transactions on Programming Languages and Systems*, 29(5):25:1–25:37, August 2007. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).

Fernandez:2004:ICS

- [FH04] Antonio J. Fernández and Patricia M. Hill. An interval constraint system for lattice domains. *ACM Transactions on Programming Languages and Systems*, 26(1):1–46, January 2004. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).

Fidge:1993:FDP

- [Fid93] C. J. Fidge. A formal defini-

tion of priority in CSP. *ACM Transactions on Programming Languages and Systems*, 15(4):681–705, September 1993. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/155221.html>.

Fischer:1980:PCA

- [Fis80] Charles N. Fischer. On parsing and compiling arithmetic expressions on vector computers. *ACM Transactions on Programming Languages and Systems*, 2(2):203–224, April 1980. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).

Forejt:2017:PPA

- [FJK⁺17] Vojtěch Forejt, Saurabh Joshi, Daniel Kroening, Ganesh Narayanaswamy, and Subodh Sharma. Precise predictive analysis for discovering communication deadlocks in MPI programs. *ACM Transactions on Programming Languages and Systems*, 39(4):15:1–15:??, September 2017. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).

Foster:2006:FIT

- [FJKA06] Jeffrey S. Foster, Robert Johnson, John Kodumal, and Alex Aiken. Flow-insensitive type qualifiers. *ACM Transactions on Programming Languages and Systems*, 28(6):1035–1087, November 2006. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).

Fuchs:1985:OPF

- [FK85] David R. Fuchs and Donald E. Knuth. Optimal prepagging and font caching. *ACM Transactions on Programming Languages and Systems*, 7(1):62–79, January 1985. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/FL912367.html>.

Fokkink:1998:WAR

- [FKW98] Wan Fokkink, Jasper Kamperman, and Pum Walters. Within ARM's reach: Compilation of left-linear rewrite systems via minimal rewrite systems. *ACM Transactions on Programming Languages and Systems*, 20(3):679–706, May 1998. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/toplas/1998-20-3/p679-fokkink/>.

Fokkink:2000:LRE

- [FKW00] Wan Fokkink, Jasper Kamperman, and Pum Walters. Lazy rewriting on eager machinery. *ACM Transactions on Programming Languages and Systems*, 22(1):45–86, January 2000. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/citations/journals/toplas/2000-22-1/p45-fokkink/>.

Fraser:1981:EDS

[FL81] Christopher W. Fraser and A. A. Lopez. Editing data structures. *ACM Transactions on Programming Languages and Systems*, 3(2):115–125, April 1981. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).

Fradet:1991:CFL

Pascal Fradet and Daniel Le Métayer. Compilation of functional languages by program transformation. *ACM Transactions on Programming Languages and Systems*, 13(1):21–51, January 1991. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/102805.html>.

Frechtling:2015:MMS

- [FL15] Michael Frechtling and Philip H. W. Leong. MCALIB: Measuring sensitivity to rounding error with Monte Carlo programming. *ACM Transactions on Programming Languages and Systems*, 37(2):5:1–5:??, April 2015. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).

Fischer:1989:DFA

[FLBB89] Michael J. Fischer, Nancy A. Lynch, James E. Burns, and Allan Borodin. Distributed FIFO allocation of identical resources using small shared space. *ACM Transactions on Programming Languages and Systems*, 11(1):

- 90–114, January 1989. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/59292.html>. [FMoPS11]
- [FM87a] Raphael Finkel and Udi Manber. DIB — a distributed implementation of backtracking. *ACM Transactions on Programming Languages and Systems*, 9(2):235–256, April 1987. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/24067.html>. [FNBG20]
- [FM87b] Christopher W. Fraser and Eugene W. Myers. An editor for revision control. *ACM Transactions on Programming Languages and Systems*, 9(2):277–295, April 1987. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/22948.html>. [Fos96]
- [FM99] Stephen N. Freund and John C. Mitchell. The type system for object initialization in the Java bytecode language. *ACM Transactions on Programming Languages and Systems*, 21(6):1196–1250, November 1999. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/citations/journals/toplas/1999-21-6/p1196-freund/>. [FOW87]
- Flexeder:2011:FIL**
Andrea Flexeder, Markus Müller-olm, Michael Petter, and Helmut Seidl. Fast interprocedural linear two-variable equalities. *ACM Transactions on Programming Languages and Systems*, 33(6):21:1–21:33, December 2011. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- Frohn:2020:ILR**
Florian Frohn, Matthias Naaf, Marc Brockschmidt, and Jürgen Giesl. Inferring lower runtime bounds for integer programs. *ACM Transactions on Programming Languages and Systems*, 42(3):13:1–13:50, December 2020. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <https://dl.acm.org/doi/10.1145/3410331>.
- Foster:1996:CPP**
Ian Foster. Compositional parallel programming languages. *ACM Transactions on Programming Languages and Systems*, 18(4):454–476, July 1996. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/toplas/233565.html>.
- Ferrante:1987:PDG**
Jeanne Ferrante, Karl J. Ottenstein, and Joe D. Warren. The program dependence graph

- and its use in optimization. *ACM Transactions on Programming Languages and Systems*, 9 (3):319–349, July 1987. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/24041.html>. [Fra80b]
- [FP02] Kathleen Fisher and Benjamin C. Pierce. Guest editorial. *ACM Transactions on Programming Languages and Systems*, 24(2):111, March 2002. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). [Fra81]
- [FPS19] Leandro Facchinetti, Zachary Palmer, and Scott Smith. Higher-order demand-driven program analysis. *ACM Transactions on Programming Languages and Systems*, 41(3):14:1–14:??, July 2019. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL https://dl.acm.org/ft_gateway.cfm?id=3310340. [FRW90]
- [Fra80a] Nissim Francez. Corrigendum: “Distributed Termination”. *ACM Transactions on Programming Languages and Systems*, 2(3):463, July 1980. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). See [Fra80b, Moh81, Fra81].
- Nissim Francez. Distributed termination. *ACM Transactions on Programming Languages and Systems*, 2(1):42–55, January 1980. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). See also corrigendum [Fra80a] and remarks [Moh81, Fra81].
- N. Francez. Technical correspondence: Reply from Francez. *ACM Transactions on Programming Languages and Systems*, 3(1):112–113, January 1981. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). See [Fra80b, Moh81].
- William M. Farmer, John D. Ramsdell, and Ronald J. Watro. A correctness proof for combinator reduction with cycles. *ACM Transactions on Programming Languages and Systems*, 12(1):123–134, January 1990. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/77612.html>.
- Hongyu Fan, Zhihang Sun, and Fei He. Satisfiability modulo ordering consistency theory for SC, TSO, and PSO memory models. *ACM Transactions on Programming Languages and Systems*, 45

- (1):6:1-6:??, March 2023. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <https://dl.acm.org/doi/10.1145/3579835>. [FY85]
- Freudenberger:1983:ESO**
- [FSS83] Stefan M. Freudenberger, Jacob T. Schwartz, and Micha Sharir. Experience with the SETL optimizer. *ACM Transactions on Programming Languages and Systems*, 5(1):26–45, January 1983. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). [GA96]
- Foster:1994:CAS**
- [FT94] Ian Foster and Stephen Taylor. A compiler approach to scalable concurrent-program design. *ACM Transactions on Programming Languages and Systems*, 16(3):577–604, May 1994. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/177612.html>. [Gaz83]
- Fricker:1995:ICI**
- [FTJ95] Christine Fricker, Olivier Temam, and William Jalby. Influence of cross-interferences on blocked loops: a case study with matrix-vector multiply. *ACM Transactions on Programming Languages and Systems*, 17(4):561–575, July 1995. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/210185.html>. [GB99]
- Francez:1985:SIC**
- Nissim Francez and Shaula A. Yemini. Symmetric intertask communication. *ACM Transactions on Programming Languages and Systems*, 7(4):622–636, October 1985. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/4475.html>.
- George:1996:IRC**
- Lal George and Andrew W. Appel. Iterated register coalescing. *ACM Transactions on Programming Languages and Systems*, 18(3):300–324, May 1996. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/229546.html>.
- Gazing:1983:PSP**
- Harald Gazing. Parameterized specifications: Parameter passing and implementation with respect to observability. *ACM Transactions on Programming Languages and Systems*, 5(3):318–354, July 1983. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- Greiner:1999:PTE**
- John Greiner and Guy E. Blelloch. A provably time-efficient parallel implementation of full speculation. *ACM Transactions on Programming Languages and Systems*, 21(2):240–

- 285, March 1999. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). [GD82]
 URL <http://www.acm.org/pubs/citations/journals/toplas/1999-21-2/p240-greiner/>.
- Gouda:1986:PLN**
- [GC86] Mohamed G. Gouda and Chung-Kou Chang. Proving liveness for networks of communicating finite state machines. *ACM Transactions on Programming Languages and Systems*, 8(1): 154–182, January 1986. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/5002.html>. [GDF23]
- Grove:2001:FCG**
- [GC01] David Grove and Craig Chambers. A framework for call graph construction algorithms. *ACM Transactions on Programming Languages and Systems*, 23(6):685–746, November 2001. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). [GEGP17]
- Gulavani:2011:BSA**
- [GCRN11] Bhargav S. Gulavani, Supratik Chakraborty, G. Ramalingam, and Aditya V. Nori. Bottom-up shape analysis using LISF. *ACM Transactions on Programming Languages and Systems*, 33(5):17:1–17:41, November 2011. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). [Gel85]
- Gergeron:1982:SAS**
- J. Gergeron and A. Dubuque. A structured APL system. *ACM Transactions on Programming Languages and Systems*, 4(4): 585–600, October 1982. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- Greenman:2023:TUI**
- Ben Greenman, Christos Dimoulas, and Matthias Felleisen. Typed-untyped interactions: a comparative analysis. *ACM Transactions on Programming Languages and Systems*, 45(1): 4:1–4:??, March 2023. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <https://dl.acm.org/doi/10.1145/3579833>.
- Gordon:2017:VIL**
- Colin S. Gordon, Michael D. Ernst, Dan Grossman, and Matthew J. Parkinson. Verifying invariants of lock-free data structures with rely-guarantee and refinement types. *ACM Transactions on Programming Languages and Systems*, 39(3): 11:1–11:??, July 2017. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- Gelernter:1985:GCL**
- David Gelernter. Generative communication in Linda. *ACM Transactions on Programming Languages and Systems*, 7(1): 80–112, January 1985. CODEN ATPSDT. ISSN 0164-0925

(print), 1558-4593 (electronic).
 URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/2433.html>. [GGL15]

Georgeff:1984:TRS

- [Geo84] Michael Georgeff. Transformations and reduction strategies for typed lambda expressions. *ACM Transactions on Programming Languages and Systems*, 6(4):603–631, October 1984. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). See remark [NN86]. [GGSV22]

Ganapathi:1985:AGD

- [GF85] Mahadevan Ganapathi and Charles N. Fischer. Affix grammar driven code generation. *ACM Transactions on Programming Languages and Systems*, 7(4):560–599, October 1985. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/4486.html>. [GH80]

Gini:1985:DWM

- [GG85] Giuseppina C. Gini and Maria L. Gini. Dealing with world-model-based programs. *ACM Transactions on Programming Languages and Systems*, 7(2):334–347, April 1985. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/3479.html>. [GH97]

Gesbert:2015:LAD

Nils Gesbert, Pierre Genevès, and Nabil Layaïda. A logical approach to deciding semantic subtyping. *ACM Transactions on Programming Languages and Systems*, 38(1):3:1–3:??, October 2015. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).

Gorinova:2022:CIT

Maria I. Gorinova, Andrew D. Gordon, Charles Sutton, and Matthijs Vákár. Conditional independence by typing. *ACM Transactions on Programming Languages and Systems*, 44(1):4:1–4:54, March 2022. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <https://dl.acm.org/doi/10.1145/3490421>.

Griswold:1980:AUP

Ralph E. Griswold and David R. Hanson. An alternative to the use of patterns in string processing. *ACM Transactions on Programming Languages and Systems*, 2(2):153–172, April 1980. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).

Gerber:1997:SRT

Richard Gerber and Seongsoo Hong. Slicing real-time programs for enhanced schedulability. *ACM Transactions on Programming Languages and Systems*, 19(3):525–555, May 1997. CODEN

- ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/citations/journals/toplas/> 1997-19-3/p525-gerber/. [Gho93]
- GarciaDeLaBanda:1996:GAC**
- [GHB⁺96] M. Garcia De La Banda, M. Hermenegildo, M. Bruynooghe, V. Dumortier, G. Janssens, and W. Simoens. Global analysis of constraint logic programs. *ACM Transactions on Programming Languages and Systems*, 18(5):564–614, September 1996. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/toplas/235456.html>. [GHR80]
- Grove:2019:FRR**
- [GHH⁺19] David Grove, Sara S. Hamouda, Benjamin Herta, Arun Iyengar, Kiyokuni Kawachiya, Josh Milthorpe, Vijay Saraswat, Avraham Shinnar, Mikio Takeuchi, and Olivier Tardieu. Failure recovery in resilient X10. *ACM Transactions on Programming Languages and Systems*, 41(3):15:1–15:??, July 2019. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL https://dl.acm.org/ft_gateway.cfm?id=3332372. [GHS83]
- Griswold:1981:GI**
- [GHK81] Ralph E. Griswold, David R. Hanson, and John T. Korb. Generators in Icon. *ACM Transactions on Programming Languages and Systems*, 3(2):144–161, April 1981. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). [Gie83]
- Ghosh:1993:ASP**
- Sukumar Ghosh. An alternative solution to a problem on self-stabilization. *ACM Transactions on Programming Languages and Systems*, 15(4):735–742, September 1993. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/155228.html>.
- Graham:1980:ICF**
- Susan L. Graham, Michael A. Harrison, and Walter L. Ruzzo. An improved context-free recognizer. *ACM Transactions on Programming Languages and Systems*, 2(3):415–462, July 1980. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- Gallager:1983:DAM**
- R. G. Gallager, P. A. Humblet, and P. M. Spira. A distributed algorithm for minimum-weight spanning trees. *ACM Transactions on Programming Languages and Systems*, 5(1):66–77, January 1983. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- Giegerich:1983:FFD**
- Robert Giegerich. A formal framework for the derivation of machine-specific optimizers. *ACM Transactions on Programming Languages and Systems*, 5

- (3):478–498, July 1983. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). [GKM20]
- [GJ93] Gopal Gupta and Bharat Jayaraman. Analysis of Or-parallel execution models. *ACM Transactions on Programming Languages and Systems*, 15(4):659–680, September 1993. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/155220.html>. [Gupta:1993:APE]
- [GJ05] Arne John Glenstrup and Neil D. Jones. Termination analysis and specialization-point insertion in offline partial evaluation. *ACM Transactions on Programming Languages and Systems*, 27(6):1147–1215, November 2005. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). [Glenstrup:2005:TAS]
- [GKL94] David Garlan, Charles W. Krueger, and Barbara S. Lerner. TransformGen: Automating the maintenance of structure-oriented environments. *ACM Transactions on Programming Languages and Systems*, 16(3):727–774, May 1994. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/177697.html>. [Garlan:1994:TAM]
- [Gharat:2020:GPG] Pritam M. Gharat, Uday P. Khedker, and Alan Mycroft. Generalized points-to graphs: a precise and scalable abstraction for points-to analysis. *ACM Transactions on Programming Languages and Systems*, 42(2):8:1–8:78, May 2020. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <https://dl.acm.org/doi/abs/10.1145/3382092>.
- [Gries:1980:APC] David Gries and Gary Levin. Assignment and procedure call proof rules. *ACM Transactions on Programming Languages and Systems*, 2(4):564–579, October 1980. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [Grumberg:1994:MCM] Orna Grumberg and David E. Long. Model checking and modular verification. *ACM Transactions on Programming Languages and Systems*, 16(3):843–871, May 1994. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/177725.html>.
- [GLMM05] Marco Gavanelli, Evelina Lamma, Paola Mello, and Michela Milano. Dealing with incomplete knowledge on CLP(*FD*) variable domains. *ACM Transactions*

- on *Programming Languages and Systems*, 27(2):236–263, March 2005. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). [GM81]
- [GLO88] Albert G. Greenberg, Boris D. Lubachevsky, and Andrew M. Odlyzko. Simple, efficient, asynchronous parallel algorithms for maximization. *ACM Transactions on Programming Languages and Systems*, 10(2):313–337, April 1988. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/42278.html>. [GM12]
- [GMR83] Allan Gottlieb, Boris D. Lubachevsky, and Larry Rudolph. Basic techniques for the efficient coordination of very large numbers of cooperating sequential processors. *ACM Transactions on Programming Languages and Systems*, 5(2):164–189, April 1983. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). [GMH81]
- [GM79] Carlo Ghezzi and Dino Mandrioli. Incremental parsing. *ACM Transactions on Programming Languages and Systems*, 1(1):58–70, July 1979. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). [GMM99]
- [Greif:1981:SSW] Irene Greif and Albert R. Meyer. Specifying the semantics of while programs: a tutorial and critique of a paper by Hoare and Lauer. *ACM Transactions on Programming Languages and Systems*, 3(4):484–507, October 1981. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [Ganty:2012:AVA] Pierre Ganty and Rupak Majumdar. Algorithmic verification of asynchronous programs. *ACM Transactions on Programming Languages and Systems*, 34(1):6:1–6:48, April 2012. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [Gannon:1981:DAI] John Gannon, Paul McMullin, and Richard Hamlet. Data abstraction, implementation, specification, and testing. *ACM Transactions on Programming Languages and Systems*, 3(3):211–223, July 1981. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [Ghosh:1999:CME] Somnath Ghosh, Margaret Martonosi, and Sharad Malik. Cache miss equations: a compiler framework for analyzing and tuning memory behavior. *ACM Transactions on Programming Languages and Systems*, 21(4):703–746, July 1999. CODEN ATPSDT. ISSN

0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/articles/journals/toplas/1999-21-4/p703-ghosh/p703-ghosh.pdf>; <http://www.acm.org/pubs/citations/journals/toplas/1999-21-4/p703-ghosh/>.

Gange:2021:FLZ

- [GMN⁺21] Graeme Gange, Zequn Ma, Jorge A. Navas, Peter Schachte, Harald Søndergaard, and Peter J. Stuckey. A fresh look at zones and octagons. *ACM Transactions on Programming Languages and Systems*, 43(3): 11:1–11:51, September 2021. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <https://dl.acm.org/doi/10.1145/3457885>.

Grant:2000:BCD

- [GMP⁺00] Brian Grant, Markus Mock, Matthai Philipose, Craig Chambers, and Susan J. Eggers. The benefits and costs of DyC's runtime optimizations. *ACM Transactions on Programming Languages and Systems*, 22(5):932–972, 2000. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/articles/journals/toplas/2000-22-5/p932-grant/p932-grant.pdf>; <http://www.acm.org/pubs/citations/journals/toplas/2000-22-5/p932-grant/>.

Grossman:2000:STA

- [GMZ00] Dan Grossman, Greg Morrisett,

and Steve Zdancewic. Syntactic type abstraction. *ACM Transactions on Programming Languages and Systems*, 22(6):1037–1080, 2000. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/articles/journals/toplas/2000-22-6/p1037-grossman/p1037-grossman.pdf>; <http://www.acm.org/pubs/citations/journals/toplas/2000-22-6/p1037-grossman/>.

Gange:2015:IAM

- [GNS⁺15] Graeme Gange, Jorge A. Navas, Peter Schachte, Harald Søndergaard, and Peter J. Stuckey. Interval analysis and machine arithmetic: Why signedness ignorance is bliss. *ACM Transactions on Programming Languages and Systems*, 37(1):1:1–1:??, January 2015. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).

Gomard:1992:SAP

- [Gom92] Carsten K. Gomard. A self-applicable partial evaluator for the lambda calculus: Correctness and pragmatics. *ACM Transactions on Programming Languages and Systems*, 14(2): 147–172, April 1992. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/128864.html>.

Gorlatch:2004:SRC

- [Gor04] Sergei Gorlatch. Send-recv considered harmful: Myths and

- realities of message passing. *ACM Transactions on Programming Languages and Systems*, 26(1):47–56, January 2004. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- Gordon:2021:PIS**
- [Gor21] Colin S. Gordon. Polymorphic iterable sequential effect systems. *ACM Transactions on Programming Languages and Systems*, 43(1):4:1–4:79, April 2021. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <https://dl.acm.org/doi/10.1145/3450272>.
- Grit:1981:DIT**
- [GP81] Dale H. Grit and Rex L. Page. Deleting irrelevant tasks in an expression-oriented multiprocessor system. *ACM Transactions on Programming Languages and Systems*, 3(1):49–59, January 1981. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- Girkar:1995:ETL**
- [GP95] Milind Girkar and Constantine D. Polychronopoulos. Extracting task-level parallelism. *ACM Transactions on Programming Languages and Systems*, 17(4):600–634, July 1995. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/210189.html>.
- Gupta:2001:PEP**
- [GPA⁺01] Gopal Gupta, Enrico Pontelli, Khayri A. M. Ali, Mats Carlsson, and Manuel V. Hermenegildo. Parallel execution of Prolog programs: a survey. *ACM Transactions on Programming Languages and Systems*, 23(4):472–602, July 2001. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- Gal:2008:JBV**
- [GPF08] Andreas Gal, Christian W. Probst, and Michael Franz. Java bytecode verification via static single assignment form. *ACM Transactions on Programming Languages and Systems*, 30(4):21:1–21:21, July 2008. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- Grothoff:2007:EOC**
- [GPV07] Christian Grothoff, Jens Palsberg, and Jan Vitek. Encapsulating objects with confined types. *ACM Transactions on Programming Languages and Systems*, 29(6):32:1–32:41, October 2007. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- Gil:2008:TDB**
- [GPWZ08] Joseph (Yossi) Gil, William Pugh, Grant E. Weddell, and Yoav Zibin. Two-dimensional bidirectional object layout. *ACM Transactions on Programming Languages and Systems*, 30(5):28:1–28:38, August 2008.

- CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [Gri79] David Gries. Is sometimes ever better than alway? *ACM Transactions on Programming Languages and Systems*, 1(2):258–265, October 1979. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [Gri82] Ralph E. Griswold. The evaluation of expressions in Icon. *ACM Transactions on Programming Languages and Systems*, 4(4):563–584, October 1982. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [Gro06] Dan Grossman. Quantified types in an imperative language. *ACM Transactions on Programming Languages and Systems*, 28(3):429–475, May 2006. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [GRSK⁺11] Jürgen Giesl, Matthias Rafelsieper, Peter Schneider-Kamp, Stephan Swiderski, and René Thiemann. Automated termination proofs for Haskell by term rewriting. *ACM Transactions on Programming Languages and Systems*, 33(2):7:1–7:39, January 2011. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [GS98] Roberto Giacobazzi and Francesca Scozzari. A logical model for relational abstract domains. *ACM Transactions on Programming Languages and Systems*, 20(5):1067–1109, September 1998. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/toplas/1998-20-5/p1067-giacobazzi/>.
- [GS99] Nikolas Gloy and Michael D. Smith. Procedure placement using temporal-ordering information. *ACM Transactions on Programming Languages and Systems*, 21(5):977–1027, September 1999. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/articles/journals/toplas/1999-21-5/p977-gloy/p977-gloy.pdf>; <http://www.acm.org/pubs/citations/journals/toplas/1999-21-5/p977-gloy/>.
- [GS11] Thomas Martin Gawlitza and Helmut Seidl. Solving systems of rational equations through strategy iteration. *ACM Transactions on Programming Languages and Systems*, 33(3):11:1–11:48, April 2011. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).

Gupta:1994:ERA

- [GSO94] Rajiv Gupta, Mary Lou Soffa, and Denise Ombres. Efficient register allocation via coloring using clique separators. *ACM Transactions on Programming Languages and Systems*, 16(3):370–386, May 1994. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/177499.html>. [Gud92]

Grimmer:2018:CLI

- [GSS⁺18] Matthias Grimmer, Roland Schatz, Chris Seaton, Thomas Würthinger, and Mikel Luján. Cross-language interoperability in a multi-language runtime. *ACM Transactions on Programming Languages and Systems*, 40(2):8:1–8:??, June 2018. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). [GVC15]

Gerlek:1995:BIV

- [GSW95] Michael P. Gerlek, Eric Stoltz, and Michael Wolfe. Beyond induction variables: Detecting and classifying sequences using a demand-driven SSA form. *ACM Transactions on Programming Languages and Systems*, 17(1):85–122, January 1995. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). [GW99] URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/201003.html>.

Garcia:2014:FTO

- [GTWA14] Ronald Garcia, Éric Tanter,

Roger Wolff, and Jonathan Aldrich. Foundations of typestate-oriented programming. *ACM Transactions on Programming Languages and Systems*, 36(4):12:1–12:??, October 2014. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).

Gudeman:1992:DSG

David A. Gudeman. Denotational semantics of a goal-directed language. *ACM Transactions on Programming Languages and Systems*, 14(1):107–125, January 1992. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/104659.html>.

Grosser:2015:PAG

Tobias Grosser, Sven Verdoolaege, and Albert Cohen. Polyhedral AST generation is more than scanning polyhedra. *ACM Transactions on Programming Languages and Systems*, 37(4):12:1–12:??, August 2015. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).

Gudjonsson:1999:CTM

Gudjón Gudjónsson and William H. Winsborough. Compile-time memory reuse in logic programming languages through update in place. *ACM Transactions on Programming Languages and Systems*, 21(3):430–501, May

1999. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/articles/journals/toplas/1999-21-3/p430-gudjonsson/p430-gudjonsson.pdf>; <http://www.acm.org/pubs/citations/journals/toplas/1999-21-3/p430-gudjonsson/>. [HAH12]
- [GZ04] Sabine Glesner and Wolf Zimmermann. Natural semantics as a static program analysis framework. *ACM Transactions on Programming Languages and Systems*, 26(3):510–577, May 2004. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). [Hai98]
- [GZ05] Joseph (Yossi) Gil and Yoav Zibin. Efficient subtyping tests with PQ-encoding. *ACM Transactions on Programming Languages and Systems*, 27(5):819–856, September 2005. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). [Hai05]
- [GZ07] Joseph (Yossi) Gil and Yoav Zibin. Efficient dynamic dispatching with type slicing. *ACM Transactions on Programming Languages and Systems*, 30(1):5:1–5:53, November 2007. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). [Hal85]
- Hoffmann:2012:MAR**
Jan Hoffmann, Klaus Aehlig, and Martin Hofmann. Multivariate amortized resource analysis. *ACM Transactions on Programming Languages and Systems*, 34(3):14:1–14:62, October 2012. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- Hailperin:1998:COC**
Max Hailperin. Cost-optimal code motion. *ACM Transactions on Programming Languages and Systems*, 20(6):1297–1322, November 1998. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/toplas/1998-20-6/p1297-hailperin/>.
- Hailperin:2005:CCC**
Max Hailperin. Comparing conservative coalescing criteria. *ACM Transactions on Programming Languages and Systems*, 27(3):571–582, May 2005. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- Halstead:1985:MLC**
Robert H. Halstead, Jr. Multilisp: A Language for Concurrent Symbolic Computation. *ACM Transactions on Programming Languages and Systems*, 7(4):501–538, October 1985. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- Glesner:2004:NSS**
- Gil:2005:EST**
- Gil:2007:EDD**

URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/4478.html>.

Hall:2005:IPA

- [HAM⁺05] Mary W. Hall, Saman P. Amarasinghe, Brian R. Murphy, Shih-Wei Liao, and Monica S. Lam. Interprocedural parallelization analysis in SUIF. *ACM Transactions on Programming Languages and Systems*, 27(4): 662–731, July 2005. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).

Hansen:1981:CMI

- [Han81a] Wilfred J. Hansen. A cost model for the internal organization of B⁺-tree nodes. *ACM Transactions on Programming Languages and Systems*, 3(4): 508–532, October 1981. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).

Hanson:1981:APP

- [Han81b] David R. Hanson. Algorithm 568. PDS — a portable directory system. *ACM Transactions on Programming Languages and Systems*, 3(2):162–167, April 1981. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://doi.acm.org/10.1145/357133.357137>.

Hansen:1992:SRF

- [Han92] Wilfred J. Hansen. Subsequence references: First-class values for substrings. *ACM Transactions on Programming*

Languages and Systems, 14(4): 471–489, October 1992. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/133234.html>.

Hannan:1994:OSD

- [Han94] John Hannan. Operational semantics-directed compilers and machine architectures. *ACM Transactions on Programming Languages and Systems*, 16(4): 1215–1247, July 1994. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/183458.html>.

Harel:1980:PNA

- [Har80] David Harel. And/Or programs: a new approach to structured programming. *ACM Transactions on Programming Languages and Systems*, 2(1): 1–17, January 1980. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).

Hauser:1996:HFP

- [Hau96] John R. Hauser. Handling floating-point exceptions in numeric programs. *ACM Transactions on Programming Languages and Systems*, 18(2):139–174, March 1996. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/227701.html>.

Havlak:1997:NRI

- [Hav97] Paul Havlak. Nesting of reducible and irreducible loops. *ACM Transactions on Programming Languages and Systems*, 19(4):557–567, July 1997. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/toplas/1997-19-4/p557-havlak/>.

Hind:1999:IPA

- [HBCC99] Michael Hind, Michael Burke, Paul Carini, and Jong-Deok Choi. Interprocedural pointer alias analysis. *ACM Transactions on Programming Languages and Systems*, 21(4):848–894, July 1999. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/articles/journals/toplas/1999-21-4/p848-hind/p848-hind.pdf>; <http://www.acm.org/pubs/citations/journals/toplas/1999-21-4/p848-hind/>.

Harman:2009:DCS

- [HBG⁺09] Mark Harman, David Binkley, Keith Gallagher, Nicolas Gold, and Jens Krinke. Dependence clusters in source code. *ACM Transactions on Programming Languages and Systems*, 32(1):1:1–1:33, October 2009. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).

Hassen:1998:TDP

- [HBJ98] Saniya Ben Hassen, Henri E. Bal, and Criel J. H. Jacobs. A task- and data-parallel programming language based on shared objects. *ACM Transactions on Programming Languages and Systems*, 20(6):1131–1170, November 1998. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL http://www.acm.org:80/pubs/citations/journals/toplas/1998-20-6/p1131-ben_hassen/.

Hertz:2006:GOL

- [HBM⁺06] Matthew Hertz, Stephen M. Blackburn, J. Eliot B. Moss, Kathryn S. McKinley, and Darko Stefanović. Generating object lifetime traces with Merlin. *ACM Transactions on Programming Languages and Systems*, 28(3):476–516, May 2006. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).

Hecker:2022:TSC

- [HBS22] Martin Hecker, Simon Bischof, and Gregor Snelting. On time-sensitive control dependencies. *ACM Transactions on Programming Languages and Systems*, 44(1):2:1–2:37, March 2022. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <https://dl.acm.org/doi/10.1145/3486003>.

Hickey:1992:CAM

- [HCHP92] Timothy J. Hickey, Jacques Cohen, Hitofumi Hotta, and Thierry PetitJean. Computer-assisted microanalysis of parallel programs. *ACM Transactions on Programming Languages and Systems*, 14(1):54–106, January 1992. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/126699.html>. [Hen82]

Huang:2010:DBR

- [HCS10] Yuqiang Huang, Bruce R. Childers, and Mary Lou Soffa. Detecting bugs in register allocation. *ACM Transactions on Programming Languages and Systems*, 32(4):15:1–15:36, April 2010. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). [Hen83]

Holt:1982:ISS

- [HCW82] Richard C. Holt, J. R. Cordy, and David B. Wortman. An introduction to S/SL: Syntax/Semantic Language. *ACM Transactions on Programming Languages and Systems*, 4(2):149–178, April 1982. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). [Hen86]

Hirzel:2002:UTL

- [HDH02] Martin Hirzel, Amer Diwan, and Johannes Henkel. On the usefulness of type and liveness accuracy for garbage collection and

leak detection. *ACM Transactions on Programming Languages and Systems*, 24(6):593–624, November 2002. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).

Hennessy:1982:SDO

John L. Hennessy. Symbolic debugging of optimized code. *ACM Transactions on Programming Languages and Systems*, 4(3):323–344, July 1982. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). See remark [CM93].

Henderson:1983:TCL

Peter B. Henderson. Technical correspondence: On LaLonde and des Rivieres’ “Handling Operator Precedence in Arithmetic Expressions with Tree Transformations”. *ACM Transactions on Programming Languages and Systems*, 5(1):122, January 1983. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). See [LdR81, LaL83].

Hennessy:1986:PSS

Matthew Hennessy. Proving systolic systems correct. *ACM Transactions on Programming Languages and Systems*, 8(3):344–387, July 1986. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/5999.html>.

- Henglein:1993:TIP**
- [Hen93] Fritz Henglein. Type inference with polymorphic recursion. *ACM Transactions on Programming Languages and Systems*, 15(2):253–289, April 1993. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). [HF87] URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/169692.html>.
- Herlihy:1991:WFS**
- [Her91] Maurice Herlihy. Wait-free synchronization. *ACM Transactions on Programming Languages and Systems*, 13(1):124–149, January 1991. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/102808.html>. [HFC09]
- Herlihy:1993:MIH**
- [Her93] Maurice Herlihy. A methodology for implementing highly concurrent data objects. *ACM Transactions on Programming Languages and Systems*, 15(5):745–770, November 1993. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). [HG83] URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/161469.html>.
- Hesslink:1988:MAN**
- [Hes88] W. H. Hesslink. A mathematical approach to nondeterminism in data types. *ACM Transactions on Programming Languages and Systems*, 10(1):87–117, January 1988. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/42194.html>.
- Haynes:1987:ECP**
- Christopher T. Haynes and Daniel P. Friedman. Embedding continuations in procedural objects. *ACM Transactions on Programming Languages and Systems*, 9(4):582–598, October 1987. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/30392.html>.
- Hosoya:2009:PPX**
- Haruo Hosoya, Alain Frisch, and Giuseppe Castagna. Parametric polymorphism for XML. *ACM Transactions on Programming Languages and Systems*, 32(1):2:1–2:56, October 2009. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- Hennessy:1983:PCO**
- John L. Hennessy and Thomas Gross. Postpass code optimization of pipeline constraints. *ACM Transactions on Programming Languages and Systems*, 5(3):422–448, July 1983. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- Hall:1996:TCH**
- [HHPW96] Cordelia V. Hall, Kevin Hammond, Simon L. Peyton Jones,

- and Philip L. Wadler. Type classes in Haskell. *ACM Transactions on Programming Languages and Systems*, 18(2):109–138, March 1996. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/227700.html>. [HK07]
- [Hil88] Paul N. Hilfinger. An Ada package for dimensional analysis. *ACM Transactions on Programming Languages and Systems*, 10(2):189–203, April 1988. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/42346.html>. [HKMN94]
- [HIT97] Zhenjiang Hu, Hideya Iwasaki, and Masato Takechi. Formal derivation of efficient parallel programs by construction of list homomorphisms. *ACM Transactions on Programming Languages and Systems*, 19(3):444–461, May 1997. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/citations/journals/toplas/1997-19-3/p444-hu/>. [HKR92]
- [HK85] Jan Heering and Paul Klint. Towards monolingual programming environments. *ACM Transactions on Programming Languages and Systems*, 7(2):183–213, April 1985. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/3321.html>. [Henzinger:2007:EMP]
- Thomas A. Henzinger and Christoph M. Kirsch. The embedded machine: Predictable, portable real-time code. *ACM Transactions on Programming Languages and Systems*, 29(6):33:1–33:29, October 2007. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). [Haines:1994:CFC]
- N. Haines, D. Kindred, J. G. Morrisett, and S. M. Nettles. Composing first-class transactions. *ACM Transactions on Programming Languages and Systems*, 16(6):1719–1736, November 1994. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/197346.html>. [Heering:1992:IGL]
- J. Heering, P. Klint, and J. Rekers. Incremental generation of lexical scanners. *ACM Transactions on Programming Languages and Systems*, 14(4):490–520, October 1992. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/133240.html>. [Hilfinger:1988:APD]
- [Hu:1997:FDE]
- [Heering:1985:TMP]

- [HKR94] **Heering:1994:LIP**
 J. Heering, P. Klint, and J. Rekers. Lazy and incremental program generation. *ACM Transactions on Programming Languages and Systems*, 16(3):1010–1023, May 1994. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/177750.html>.
- [HL82] **Herlihy:1982:VTM**
 Maurice P. Herlihy and Barbara Liskov. A value transmission method for abstract data types. *ACM Transactions on Programming Languages and Systems*, 4(4):527–551, October 1982. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [HL05] **Hirschowitz:2005:MMC**
 Tom Hirschowitz and Xavier Leroy. Mixin modules in a call-by-value setting. *ACM Transactions on Programming Languages and Systems*, 27(5):857–881, September 2005. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [HL22] **Haslbeck:2022:FDM**
 Maximilian P. L. Haslbeck and Peter Lammich. For a few dollars more: Verified fine-grained algorithm analysis down to LLVM. *ACM Transactions on Programming Languages and Systems*, 44(3):14:1–14:36, September 2022. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [HLH19] **Hague:2019:CMC**
 Matthew Hague, Anthony W. Lin, and Chih-Duo Hong. CSS minimification via constraint solving. *ACM Transactions on Programming Languages and Systems*, 41(2):12:1–12:??, June 2019. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <https://dl.acm.org/doi/10.1145/3486169>.
- [HLH⁺23] **Hu:2023:TPO**
 Jingmei Hu, Eric Lu, David A. Holland, Ming Kawaguchi, Stephen Chong, and Margo Seltzer. Towards porting operating systems with program synthesis. *ACM Transactions on Programming Languages and Systems*, 45(1):2:1–2:??, March 2023. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <https://dl.acm.org/doi/10.1145/3563943>.
- [HM84] **Hull:1984:CSP**
 M. Elizabeth C. Hull and R. M. McKeag. Communicating sequential processes for centralized and distributed operating system design. *ACM Transactions on Programming Languages and Systems*, 6(2):175–191, April 1984. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).

- [HM93] **Harper:1993:TSS** Robert Harper and John C. Mitchell. On the type structure of standard ML. *ACM Transactions on Programming Languages and Systems*, 15(2): 211–252, April 1993. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/169696.html>. Earlier version appears as “The Essence of ML” in *Proc. 15th ACM Symp. on Principles of Programming Languages*, 1988, pp. 28–46.
- [HMS06] **Hamlen:2006:CCE** Kevin W. Hamlen, Greg Morrisett, and Fred B. Schneider. Computability classes for enforcement mechanisms. *ACM Transactions on Programming Languages and Systems*, 28(1): 175–205, January 2006. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [HN05] **Hicks:2005:DSU** Michael Hicks and Scott Nettles. Dynamic software updating. *ACM Transactions on Programming Languages and Systems*, 27(6):1049–1096, November 2005. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [HO82] **Hoffman:1982:PE** Christoph M. Hoffman and Michael J. O’Donnell. Programming with equations. *ACM Transactions on Programming Languages and Systems*, 4(1): 83–112, January 1982. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [HO07] **Higuchi:2007:STS** Tomoyuki Higuchi and Atsushi Ohori. A static type system for JVM access control. *ACM Transactions on Programming Languages and Systems*, 29(1): 4:1–4:42, January 2007. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [Hob84] **Hobson:1984:DEE** Richard F. Hobson. A directly executable encoding for APL. *ACM Transactions on Programming Languages and Systems*, 6(3):314–332, July 1984. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [Hol87] **Holt:1987:DDC** Richard C. Holt. Data descriptors: a compile-time model of data and addressing. *ACM Transactions on Programming Languages and Systems*, 9(3): 367–389, July 1987. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/24051.html>.
- [Hor97] **Horwitz:1997:PFI** Susan Horwitz. Precise flow-insensitive may-alias analysis is NP-Hard. *ACM Transactions on Programming Lan-*

guages and Systems, 19(1):1–6, January 1997. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/citations/journals/toplas/1997-19-1/p1-horwitz/>. [HPMS00]

Howden:1980:ASV

[How80] W. E. Howden. Applicability of software validation techniques to scientific programs. *ACM Transactions on Programming Languages and Systems*, 2(3):307–320, July 1980. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).

Heo:2018:ASA

[HOYY18] Kihong Heo, Hakjoo Oh, Hongseok Yang, and Kwangkeun Yi. Adaptive static analysis via learning with Bayesian optimization. *ACM Transactions on Programming Languages and Systems*, 40(4):14:1–14:??, December 2018. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL https://dl.acm.org/ft_gateway.cfm?id=3121135.

Haghighat:1996:SAP

[HP96] Mohammad R. Haghighat and Constantine D. Polychronopoulos. Symbolic analysis for parallelizing compilers. *ACM Transactions on Programming Languages and Systems*, 18(4):477–518, July 1996. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/>

<pubs/toc/Abstracts/toplas/233568.html>.

Hermenegildo:2000:IAC

Manuel Hermenegildo, German Puebla, Kim Marriott, and Peter J. Stuckey. Incremental analysis of constraint logic programs. *ACM Transactions on Programming Languages and Systems*, 22(2):187–223, March 2000. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/citations/journals/toplas/2000-22-2/p187-hermenegildo/>

Horwitz:1989:INV

[HPR89] Susan Horwitz, Jan Prins, and Thomas Reps. Integrating non-interfering versions of programs. *ACM Transactions on Programming Languages and Systems*, 11(3):345–387, July 1989. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/65980.html>.

Henzinger:2002:AGR

[HQRT02] Thomas A. Henzinger, Shaz Qadeer, Sriram K. Rajamani, and Serdar Tasiran. An assume-guarantee rule for checking simulation. *ACM Transactions on Programming Languages and Systems*, 24(1):51–64, January 2002. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).

Hennessy:2002:IFV

- [HR02] Matthew Hennessy and James Riely. Information flow vs. resource access in the asynchronous pi-calculus. *ACM Transactions on Programming Languages and Systems*, 24(5):566–591, September 2002. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).

Horwitz:1990:ISU

- [HRB90] Susan Horwitz, Thomas Reps, and David Binkley. Interprocedural slicing using dependence graphs. *ACM Transactions on Programming Languages and Systems*, 12(1):26–60, January 1990. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/77608.html>. [HSG17]

Harrold:1994:ECI

- [HS94] Mary Jean Harrold and Mary Lou Soffa. Efficient computation of interprocedural definition-use chains. *ACM Transactions on Programming Languages and Systems*, 16(2):175–204, March 1994. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). [HSP83] URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/174663.html>.

Huang:2011:MSS

- [HS11] Shan Shan Huang and Yannis Smaragdakis. Morphing: Structurally shaping a class by re-

flecting on others. *ACM Transactions on Programming Languages and Systems*, 33(2):6:1–6:44, January 2011. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).

Hu:2022:SPS

[HSD22] Qinheping Hu, Rishabh Singh, and Loris D’Antoni. Solving program sketches with large integer values. *ACM Transactions on Programming Languages and Systems*, 44(2):9:1–9:28, June 2022. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <https://dl.acm.org/doi/10.1145/3532849>.

Hirzel:2017:SEL

Martin Hirzel, Scott Schneider, and Bugra Gedik. SPL: an extensible language for distributed stream processing. *ACM Transactions on Programming Languages and Systems*, 39(1):5:1–5:??, March 2017. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).

Hart:1983:TPC

Sergiu Hart, Micha Sharir, and Amir Pnueli. Termination of probabilistic concurrent program. *ACM Transactions on Programming Languages and Systems*, 5(3):356–380, July 1983. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).

- [HSS⁺14] **Hayden:2014:KEG** Christopher M. Hayden, Karla Saur, Edward K. Smith, Michael Hicks, and Jeffrey S. Foster. Kit-sune: Efficient, general-purpose dynamic software updating for C. *ACM Transactions on Programming Languages and Systems*, 36(4):13:1–13:??, October 2014. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [HT86] **Horwitz:1986:GEE** Susan Horwitz and Tim Teitelbaum. Generating editing environments based on relations and attributes. *ACM Transactions on Programming Languages and Systems*, 8(4):577–608, October 1986. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/6512.html>.
- [HT04] **Helsen:2004:PSM** Simon Helsen and Peter Thiemann. Polymorphic specialization for ML. *ACM Transactions on Programming Languages and Systems*, 26(4):652–701, July 2004. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [HU96] **Holzle:1996:RRP** Urs Hölzle and David Ungar. Reconciling responsiveness with performance in pure object-oriented languages. *ACM Transactions on Programming Languages and Systems*, 18(4):355–400, July 1996. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/toplas/233562.html>.
- [Hua90] **Huang:1990:DDD** Shing-Tsaan Huang. A distributed deadlock detection algorithm for CSP-like communication. *ACM Transactions on Programming Languages and Systems*, 12(1):102–122, January 1990. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/77611.html>.
- [Hua93] **Huang:1993:LEU** Shing-Tsaan Huang. Leader election in uniform rings. *ACM Transactions on Programming Languages and Systems*, 15(3):563–573, July 1993. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/174161.html>.
- [Hud91] **Hudson:1991:IAE** Scott E. Hudson. Incremental attribute evaluation: a flexible algorithm for lazy update. *ACM Transactions on Programming Languages and Systems*, 13(3):315–341, July 1991. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/>

- pubs/toc/Abstracts/0164-0925/117012.html.
- [HVB⁺99] Seif Haridi, Peter Van Roy, Per Brand, Michael Mehl, Ralf Scheidhauer, and Gert Smolka. Efficient logic variables for distributed computing. *ACM Transactions on Programming Languages and Systems*, 21(3):569–626, May 1999. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/articles/journals/toplas/1999-21-3/p569-haridi/p569-haridi.pdf>; <http://www.acm.org/pubs/citations/journals/toplas/1999-21-3/p569-haridi/>.
- [HW82] **Haridi:1999:ELV** Richard C. Holt and David B. Wortman. A model for implementing Euclid modules and prototypes. *ACM Transactions on Programming Languages and Systems*, 4(4):552–562, October 1982. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [HW90] **Herlihy:1990:LCC** Maurice P. Herlihy and Jeanette M. Wing. Linearizability: a correctness condition for concurrent objects. *ACM Transactions on Programming Languages and Systems*, 12(3):463–492, July 1990. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/78972.html>.
- [HVDH07] **Hirzel:2007:FOP** Martin Hirzel, Daniel Von Dincklage, Amer Diwan, and Michael Hind. Fast online pointer analysis. *ACM Transactions on Programming Languages and Systems*, 29(2):11:1–11:55, April 2007. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [HVP05] **Hosoya:2005:RET** Haruo Hosoya, Jérôme Vouillon, and Benjamin C. Pierce. Regular expression types for XML. *ACM Transactions on Programming Languages and Systems*, 27(1):46–90, January 2005. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [HY91] **Hudak:1991:CIE** Paul Hudak and Jonathan Young. Collecting interpretations of expressions. *ACM Transactions on Programming Languages and Systems*, 13(2):269–290, April 1991. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/103139.html>.
- [HY07] **Honda:2007:UTS** Kohei Honda and Nobuko Yoshida. A uniform type structure for secure information flow.

- ACM Transactions on Programming Languages and Systems*, 29(6):31:1–31:100, October 2007. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). [ISY88]
- Igarashi:2005:RUA**
- [IK05] Atsushi Igarashi and Naoki Kobayashi. Resource usage analysis. *ACM Transactions on Programming Languages and Systems*, 27(2):264–313, March 2005. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). [ITF+22]
- Igarashi:2001:FJM**
- [IPW01] Atsushi Igarashi, Benjamin C. Pierce, and Philip Wadler. Featherweight Java: a minimal core calculus for Java and GJ. *ACM Transactions on Programming Languages and Systems*, 23(3):396–450, May 2001. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- Ish-Shalom:2022:RCB** [IV06]
- [ISIRS22] Oren Ish-Shalom, Shachar Itzhaky, Noam Rinetzky, and Sharon Shoham. Runtime complexity bounds using squeezers. *ACM Transactions on Programming Languages and Systems*, 44(3):17:1–17:36, September 2022. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <https://dl.acm.org/doi/10.1145/3527632>. [Ive79]
- Inoue:1988:AFP**
- Katsuro Inoue, Hiroyuki Seki, and Hikaru Yagi. Analysis of functional programs to detect run-time garbage cells. *ACM Transactions on Programming Languages and Systems*, 10(4):555–578, October 1988. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/48025.html>.
- Inverso:2022:BVM**
- Omar Inverso, Ermenegildo Tomasco, Bernd Fischer, Salvatore La Torre, and Gennaro Parlato. Bounded verification of multi-threaded programs via lazy sequentialization. *ACM Transactions on Programming Languages and Systems*, 44(1):1:1–1:50, March 2022. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <https://dl.acm.org/doi/10.1145/3478536>.
- Igarashi:2006:VPT**
- Atsushi Igarashi and Mirko Viroli. Variant parametric types: a flexible subtyping scheme for generics. *ACM Transactions on Programming Languages and Systems*, 28(5):795–847, September 2006. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- Iverson:1979:O**
- Kenneth E. Iverson. Operators. *ACM Transactions on Program-*

ming Languages and Systems, 1 (2):161–176, October 1979. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).

Jagannathan:1994:MBB

[Jag94]

Suresh Jagannathan. Metalevel building blocks for modular systems. *ACM Transactions on Programming Languages and Systems*, 16(3):456–492, May 1994. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/177578.html>.

Jay:2004:PC

[Jay04]

C. Barry Jay. The pattern calculus. *ACM Transactions on Programming Languages and Systems*, 26(6):911–937, November 2004. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).

Joisha:2006:AAS

[JB06]

Pramod G. Joisha and Prithviraj Banerjee. An algebraic array shape inference system for MATLAB(R). *ACM Transactions on Programming Languages and Systems*, 28(5):848–907, September 2006. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).

Jangda:2020:EFT

[JB20]

Abhinav Jangda and Uday Bondhugula. An effective fusion and tile size model for PolyMage. *ACM Transactions on Programming Languages and Systems*, 42

(3):12:1–12:27, December 2020. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <https://dl.acm.org/doi/10.1145/3404846>.

Jacobs:2018:MTV

[JBK18]

Bart Jacobs, Dragan Bosnacki, and Ruurd Kuiper. Modular termination verification of single-threaded and multithreaded programs. *ACM Transactions on Programming Languages and Systems*, 40(3):12:1–12:??, August 2018. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).

Janssen:1997:MGR

[JC97]

Johan Janssen and Henk Corporaal. Making graphs reducible with controlled node splitting. *ACM Transactions on Programming Languages and Systems*, 19(6):1031–1052, November 1997. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/toplas/1997-19-6/p1031-janssen/>.

Jacek:2019:OCW

[JCMM19]

Nicholas Jacek, Meng-Chieh Chiu, Benjamin M. Marlin, and J. Eliot B. Moss. Optimal choice of when to garbage collect. *ACM Transactions on Programming Languages and Systems*, 41(1):3:1–3:??, March 2019. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).

- [Jef85] **Jefferson:1985:VT**
David R. Jefferson. Virtual time. *ACM Transactions on Programming Languages and Systems*, 7(3):404–425, July 1985. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/3988.html>.
- [Jef03] **Jeffery:2003:GLS**
Clinton L. Jeffery. Generating LR syntax error messages from examples. *ACM Transactions on Programming Languages and Systems*, 25(5):631–640, September 2003. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [Jen97] **Jensen:1997:DPA**
Thomas Jensen. Disjunctive program analysis for algebraic data types. *ACM Transactions on Programming Languages and Systems*, 19(5):751–803, September 1997. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/toplas/1997-19-5/p751-jensen/>.
- [JF81] **Juelich:1981:CAS**
Otto C. Juelich and Clinton R. Foulk. Compilation of acyclic smooth programs for parallel execution. *ACM Transactions on Programming Languages and Systems*, 3(1):24–48, January 1981. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [JJCO19] **Jeon:2019:MLA**
Minseok Jeon, Sehun Jeong, Sungdeok Cha, and Hakjoo Oh. A machine-learning algorithm with disjunctive model for data-driven program analysis. *ACM Transactions on Programming Languages and Systems*, 41(2):13:1–13:??, June 2019. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL https://dl.acm.org/ft_gateway.cfm?id=3293607.
- [JJD98] **Jackson:1998:IFM**
Daniel Jackson, Somesh Jha, and Craig A. Damon. Isomorph-free model enumeration: a new method for checking relational specifications. *ACM Transactions on Programming Languages and Systems*, 20(2):302–343, March 1998. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/toplas/1998-20-2/p302-jackson/>.
- [JLF02] **Jimenez:2002:RTN**
Marta Jiménez, José M. Llbería, and Agustín Fernández. Register tiling in nonrectangular iteration spaces. *ACM Transactions on Programming Languages and Systems*, 24(4):409–453, July 2002. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).

- [JLP⁺14] **Jagannathan:2014:ARV**
 Suresh Jagannathan, Vincent Laporte, Gustavo Petri, David Pichardie, and Jan Vitek. Atomicity refinement for verified compilation. *ACM Transactions on Programming Languages and Systems*, 36(2):6:1–6:??, July 2014. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [JLRS10] **Jeannet:2010:RAI**
 Bertrand Jeannet, Alexey Logunov, Thomas Reps, and Mooly Sagiv. A relational approach to interprocedural shape analysis. *ACM Transactions on Programming Languages and Systems*, 32(2):5:1–5:52, January 2010. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [JMSY92] **Jaffar:1992:CLS**
 Joxan Jaffar, Spiro Michaylov, Peter J. Stuckey, and Roland H. C. Yap. The CLP(\mathcal{R}) language and system. *ACM Transactions on Programming Languages and Systems*, 14(3):339–395, July 1992. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/129398.html>.
- [JNGG10] **Jeffrey:2010:ESA**
 Dennis Jeffrey, Vijay Nagarajan, Rajiv Gupta, and Neelam Gupta. Execution suppression: an automated iterative technique for locating
- [JNZ06] **Joshi:2006:DPA**
 Rajeev Joshi, Greg Nelson, and Yunhong Zhou. Denali: a practical algorithm for generating optimal code. *ACM Transactions on Programming Languages and Systems*, 28(6):967–989, November 2006. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [Jon83] **Jones:1983:TST**
 C. B. Jones. Tentative steps toward a development method for interfering programs. *ACM Transactions on Programming Languages and Systems*, 5(4):596–619, October 1983. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [Jon90] **Jones:1990:EEC**
 Larry G. Jones. Efficient evaluation of circular attribute grammars. *ACM Transactions on Programming Languages and Systems*, 12(3):429–462, July 1990. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/78971.html>.
- [Jon94] **Jonsson:1994:CSV**
 Bengt Jonsson. Compositional specification and verification
- memory errors. *ACM Transactions on Programming Languages and Systems*, 32(5):17:1–17:36, May 2010. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).

- of distributed systems. *ACM Transactions on Programming Languages and Systems*, 16(2): 259–303, March 1994. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/174665.html>. [JPS⁺08]
- [JP81] Medhi Jazayeri and Diane Pozefsky. Space-efficient storage management in an attribute grammar evaluator. *ACM Transactions on Programming Languages and Systems*, 3(4):388–404, October 1981. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). [Jazayeri:1981:SES]
- [JP17] Jacques-Henri Jourdan and François Pottier. A simple, possibly correct LR parser for C11. *ACM Transactions on Programming Languages and Systems*, 39(4):14:1–14:??, September 2017. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). [Jourdan:2017:SPC]
- [JPP91] Radha Jagadeesan, Keshav Pingali, and Prakash Panangaden. A fully abstract semantics for a first-order functional language with logic variables. *ACM Transactions on Programming Languages and Systems*, 13(4): 577–625, October 1991. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). [Jagadeesan:1991:FAS]
- URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/115371.html>. [Jacobs:2008:PMC]
- Bart Jacobs, Frank Piessens, Jan Smans, K. Rustan M. Leino, and Wolfram Schulte. A programming model for concurrent object-oriented programs. *ACM Transactions on Programming Languages and Systems*, 31(1): 1:1–1:48, December 2008. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). [Joung:1994:CFO]
- [JS94] Yuh-Jzer Joung and Scott A. Smolka. Coordinating first-order multiparty interactions. *ACM Transactions on Programming Languages and Systems*, 16(3):954–985, May 1994. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/177739.html>. [Joisha:2012:TTE]
- [JSB⁺12] Pramod G. Joisha, Robert S. Schreiber, Prithviraj Banerjee, Hans-J. Boehm, and Dhruva R. Chakrabarti. On a technique for transparently empowering classical compiler optimizations on multithreaded code. *ACM Transactions on Programming Languages and Systems*, 34(2): 9:1–9:42, June 2012. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).

- Juan:1998:CVC**
- [JTM98] Eric Y. T. Juan, Jeffrey J. P. Tsai, and Tadao Murata. Compositional verification of concurrent systems using Petri-net-based condensation rules. *ACM Transactions on Programming Languages and Systems*, 20(5): 917–979, September 1998. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/toplas/1998-20-5/p917-juan/>.
- Jakobs:2017:PPF**
- [JW17] Marie-Christine Jakobs and Heike Wehrheim. Programs from proofs: a framework for the safe execution of untrusted software. *ACM Transactions on Programming Languages and Systems*, 39(2):7:1–7:??, May 2017. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- Kaiser:1989:IDS**
- [Kai89] Gail E. Kaiser. Incremental dynamic semantics for language-based programming environments. *ACM Transactions on Programming Languages and Systems*, 11(2):169–193, April 1989. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/63400.html>.
- Kamin:1983:FDT**
- [Kam83] Samuel Kamin. Final data types and their specification. *ACM Transactions on Programming Languages and Systems*, 5(1): 97–121, January 1983. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- Karp:1984:PPF**
- [Kar84] Richard Alan Karp. Proving failure-free properties of concurrent systems using temporal logic. *ACM Transactions on Programming Languages and Systems*, 6(2):239–253, April 1984. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- Katayama:1984:TAG**
- [Kat84] Takuya Katayama. Translation of attribute grammars into procedures. *ACM Transactions on Programming Languages and Systems*, 6(3):345–369, July 1984. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- Katz:1993:SCC**
- [Kat93] Shmuel Katz. A superimposition control construct for distributed systems. *ACM Transactions on Programming Languages and Systems*, 15(2):337–356, April 1993. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/169682.html>.

- [Kau84] **Kaufman:1984:TLR**
Arie Kaufman. Tailored-list and recombination-delaying buddy systems. *ACM Transactions on Programming Languages and Systems*, 6(1):118–125, January 1984. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [KBC⁺99] **Kandemir:1999:GCO**
M. Kandemir, P. Banerjee, A. Choudhary, J. Ramanujam, and N. Shenoy. A global communication optimization technique based on data-flow analysis and linear algebra. *ACM Transactions on Programming Languages and Systems*, 21(6):1251–1297, November 1999. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/citations/journals/toplas/1999-21-6/p1251-kandemir/>.
- [KBP22] **Keizer:2022:SCC**
Alex C. Keizer, Henning Bastedo, and Jorge A. Pérez. Session coalgebras: a coalgebraic view on regular and context-free session types. *ACM Transactions on Programming Languages and Systems*, 44(3):18:1–18:45, September 2022. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <https://dl.acm.org/doi/10.1145/3527633>.
- [KC01] **Kim:2001:ERV**
Ik-Soon Kim and Kwang-Moo Choe. Error repair with validation in LR-based parsing. *ACM Transactions on Programming Languages and Systems*, 23(4):451–471, July 2001. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [KCL⁺99] **Kennedy:1999:PRE**
Robert Kennedy, Sun Chan, Shin-Ming Liu, Raymond Lo, Peng Tu, and Fred Chow. Partial redundancy elimination in SSA form. *ACM Transactions on Programming Languages and Systems*, 21(3):627–676, May 1999. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/articles/journals/toplas/1999-21-3/p627-kennedy/p627-kennedy.pdf>; <http://www.acm.org/pubs/citations/journals/toplas/1999-21-3/p627-kennedy/>.
- [KD94] **Khedker:1994:GTB**
Uday P. Khedker and Dhananjay M. Dhamdhere. A generalized theory of bit vector data flow analysis. *ACM Transactions on Programming Languages and Systems*, 16(5):1472–1511, September 1994. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/186043.html>.
- [KF00] **Kistler:2000:ADM**
Thomas Kistler and Michael Franz. Automated data-member layout of heap objects to im-

- prove memory-hierarchy performance. *ACM Transactions on Programming Languages and Systems*, 22(3):490–505, 2000. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/articles/journals/toplas/2000-22-3/p490-kistler/p490-kistler.pdf>; <http://www.acm.org/pubs/citations/journals/toplas/2000-22-3/p490-kistler/>. [KH92]
- Kistler:2003:CPO**
- [KF03] Thomas Kistler and Michael Franz. Continuous program optimization: a case study. *ACM Transactions on Programming Languages and Systems*, 25(4):500–548, July 2003. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- Knowles:2010:HTC**
- [KF10] Kenneth Knowles and Cormac Flanagan. Hybrid type checking. *ACM Transactions on Programming Languages and Systems*, 32(2):6:1–6:34, January 2010. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- Keen:2004:JFD**
- [KGM04] Aaron W. Keen, Tingjian Ge, Justin T. Maris, and Ronald A. Olsson. JR: Flexible distributed programming in an extended Java. *ACM Transactions on Programming Languages and Systems*, 26(3):578–608, May 2004. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- Kaiser:1992:OBP**
- Gail E. Kaiser and Brent Hailpern. An object-based programming model for shared data. *ACM Transactions on Programming Languages and Systems*, 14(2):201–264, April 1992. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/128866.html>.
- Kennedy:1998:ADL**
- [KK98] Ken Kennedy and Ulrich Kremer. Automatic data layout for distributed-memory machines. *ACM Transactions on Programming Languages and Systems*, 20(4):869–916, July 1998. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/toplas/1998-20-4/p869-kennedy/>.
- Karkare:2007:IBC**
- [KK07] Bageshri Karkare and Uday P. Khedker. An improved bound for call strings based interprocedural analysis of bit vector frameworks. *ACM Transactions on Programming Languages and Systems*, 29(6):38:1–38:13, October 2007. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).

- Korach:1990:MTD**
- [KKM90] E. Korach, S. Kutten, and S. Moran. A modular technique for the design of efficient distributed leader finding algorithms. *ACM Transactions on Programming Languages and Systems*, 12(1):84–101, January 1990. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/77610.html>.
- Kawahito:2006:ESE**
- [KKN06] Motohiro Kawahito, Hideaki Komatsu, and Toshio Nakatani. Effective sign extension elimination for Java. *ACM Transactions on Programming Languages and Systems*, 28(1):106–133, January 2006. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- Kennaway:1994:AGR**
- [KKSD94] J. R. Kennaway, J. W. Klop, M. R. Sleep, and F. J. De Vries. On the adequacy of graph rewriting for simulating term rewriting. *ACM Transactions on Programming Languages and Systems*, 16(3):493–523, May 1994. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/177577.html>.
- Kaiser:2014:WAM**
- [KKW14] Alexander Kaiser, Daniel Kroen-
ing, and Thomas Wahl. A widening approach to multithreaded program verification. *ACM Transactions on Programming Languages and Systems*, 36(4):14:1–14:??, October 2014. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- Koopman:1992:CBC**
- [KLS92] Philip J. Koopman, Jr., Peter Lee, and Daniel P. Siewiorek. Cache behavior of combinator graph reduction. *ACM Transactions on Programming Languages and Systems*, 14(2):265–297, April 1992. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/128867.html>. Also see [KLS92].
- Kristensen:1981:MCL**
- [KM81] Bent Bruun Kristensen and Ole Lehrmann Madsen. Methods for computing LALR(k) lookahead. *ACM Transactions on Programming Languages and Systems*, 3(1):60–82, January 1981. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- Kelly:1998:OCC**
- [KMM⁺98] Andrew D. Kelly, Kim Marriott, Andrew MacDonald, Peter J. Stuckey, and Roland Yap. Optimizing compilation of CLP(R). *ACM Transactions on Programming Languages and Systems*, 20(6):1223–1250, November 1998. CODEN ATPSDT. ISSN 0164-

- 0925 (print), 1558-4593 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/toplas/1998-20-6/p1223-kelly/>.
- [KN06] **Klein:2006:MCM**
Gerwin Klein and Tobias Nipkow. A machine-checked model for a Java-like language, virtual machine, and compiler. *ACM Transactions on Programming Languages and Systems*, 28(4):619–695, July 2006. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [Kna90] **Knapp:1990:efd**
Edgar Knapp. An exercise in the formal derivation of parallel programs: Maximum flows in graphs. *ACM Transactions on Programming Languages and Systems*, 12(2):203–223, April 1990. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/78945.html>.
- [Kob98] **Kobayashi:1998:PDF**
Naoki Kobayashi. A partially deadlock-free typed process calculus. *ACM Transactions on Programming Languages and Systems*, 20(2):436–482, March 1998. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/toplas/1998-20-2/p436-kobayashi/>.
- [KOE⁺06] **Kim:2006:ERI**
Seon Wook Kim, Chong-Liang Ooi, Rudolf Eigenmann, Babak Falsafi, and T. N. Vijaykumar. Exploiting reference idempotency to reduce speculative storage overflow. *ACM Transactions on Programming Languages and Systems*, 28(5):942–965, September 2006. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [Koz97] **Kozen:1997:KAT**
Dexter Kozen. Kleene algebra with tests. *ACM Transactions on Programming Languages and Systems*, 19(3):427–443, May 1997. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/citations/journals/toplas/1997-19-3/p427-kozen/>.
- [KPF95] **Kurlander:1995:EIS**
Steven M. Kurlander, Todd A. Proebsting, and Charles N. Fischer. Efficient instruction scheduling for delayed-load architectures. *ACM Transactions on Programming Languages and Systems*, 17(5):740–776, September 1995. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/213987.html>.
- [KPS92] **Katzenelson:1992:TMT**
Jacob Katzenelson, Shlomit S. Pinter, and Eugen Schenfeld.

- Type matching, type-graphs, and the Schanuel conjecture. *ACM Transactions on Programming Languages and Systems*, 14(4):574–588, October 1992. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/133247.html>. [Kro82]
- [KPT99] Naoki Kobayashi, Benjamin C. Pierce, and David N. Turner. Linearity and the Pi-Calculus. *ACM Transactions on Programming Languages and Systems*, 21(5):914–947, September 1999. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/articles/journals/toplas/1999-21-5/p914-kobayashi/p914-kobayashi.pdf>; <http://www.acm.org/pubs/citations/journals/toplas/1999-21-5/p914-kobayashi/>. [Kro83]
- [KR79] Ken Kennedy and Jayashree Ramanathan. A deterministic attribute grammar evaluator based on dynamic scheduling. *ACM Transactions on Programming Languages and Systems*, 1(1):142–160, July 1979. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). [Kro84]
- [KR01] Todd B. Knoblock and Jakob Rehof. Type elaboration and subtype completion for Java bytecode. *ACM Transactions on Programming Languages and Systems*, 23(2):243–272, March 2001. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). [Kro85]
- [Krogh:1982:AAP] Fred T. Krogh. ACM algorithms policy. *ACM Transactions on Programming Languages and Systems*, 4(3):518–521, July 1982. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). [Krogh:1983:AAP]
- F. T. Krogh. ACM algorithms policy. *ACM Transactions on Programming Languages and Systems*, 5(3):502–505, July 1983. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). [Krogh:1984:AAP]
- F. T. Krogh. ACM algorithms policy. *ACM Transactions on Programming Languages and Systems*, 6(3):440–443, July 1984. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). [Krogh:1985:AAP]
- F. T. Krogh. ACM algorithms policy. *ACM Transactions on Programming Languages and Systems*, 7(3):493–496, July 1985. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).

- [Kro86] **Krogh:1986:AAP**
F. T. Krogh. ACM algorithms policy. *ACM Transactions on Programming Languages and Systems*, 8(3):408–411, July 1986. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [Kro87] **Krogh:1987:AAP**
F. T. Krogh. ACM algorithms policy. *ACM Transactions on Programming Languages and Systems*, 9(3):463–466, July 1987. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [Kro88] **Krogh:1988:AAP**
F. T. Krogh. ACM algorithms policy. *ACM Transactions on Programming Languages and Systems*, 10(3):504–507, July 1988. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [Kro89] **Krogh:1989:AAP**
F. T. Krogh. ACM algorithms policy. *ACM Transactions on Programming Languages and Systems*, 11(3):483–486, July 1989. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [Kro90] **Krogh:1990:AAP**
F. T. Krogh. ACM algorithms policy. *ACM Transactions on Programming Languages and Systems*, 12(3):493–496, July 1990. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [Kro91] **Krogh:1991:AAP**
Fred T. Krogh. ACM algorithms policy. *ACM Transactions on Programming Languages and Systems*, 13(3):443–446, July 1991. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [Kro92] **Krogh:1992:AAP**
Fred T. Krogh. ACM algorithms policy. *ACM Transactions on Programming Languages and Systems*, 14(3):462–465, July 1992. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [KRR18] **Kim:2018:TFS**
Se-Won Kim, Xavier Rival, and Sukyoung Ryu. A theoretical foundation of sensitivity in an abstract interpretation framework. *ACM Transactions on Programming Languages and Systems*, 40(3):13:1–13:??, August 2018. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [KRS84] **Korach:1984:DAF**
E. Korach, D. Rotem, and N. Santoro. Distributed algorithms for finding centers and medians in networks. *ACM Transactions on Programming Languages and Systems*, 6(3):380–401, July 1984. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).

- [KRS88] **Kruskal:1988:ESM**
 Clyde P. Kruskal, Larry Rudolph, and Marc Snir. Efficient synchronization on multiprocessors with shared memory. *ACM Transactions on Programming Languages and Systems*, 10(4):579–601, October 1988. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/48024.html>. [KS86]
- [KRS94] **Knoop:1994:OCM**
 Jens Knoop, Oliver R uthing, and Bernhard Steffen. Optimal code motion: Theory and practice. *ACM Transactions on Programming Languages and Systems*, 16(4):1117–1155, July 1994. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/183443.html>. [KS88]
- [KS79] **Kieburtz:1979:CCS**
 Richard B. Kieburtz and Abraham Silberschatz. Comments on “Communicating sequential processes”. *ACM Transactions on Programming Languages and Systems*, 1(2):218–225, October 1979. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). [KS89]
- [KS83] **Kieburtz:1983:ARE**
 Richard B. Kieburtz and Abraham Silberschatz. Access-right expressions. *ACM Transactions on Programming Languages and Systems*, 5(1):78–96, January 1983. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). [KS86]
- Keller:1986:AC**
 Robert M. Keller and M. Ronan Sleep. Applicative caching. *ACM Transactions on Programming Languages and Systems*, 8(1):88–108, January 1986. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/5004.html>. [KS88]
- Kennaway:1988:DSC**
 Richard Kennaway and Ronan Sleep. Director strings as combinators. *ACM Transactions on Programming Languages and Systems*, 10(4):602–626, October 1988. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/48026.html>. See corrigendum [KS89].
- Kennaway:1989:CDS**
 Richard Kennaway and Ronan Sleep. Corrigendum: “Director Strings as Combinators”. *ACM Transactions on Programming Languages and Systems*, 11(3):482, July 1989. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). See [KS88].

- [KS10] **Kobayashi:2010:HTS**
Naoki Kobayashi and Davide Sangiorgi. A hybrid type system for lock-freedom of mobile processes. *ACM Transactions on Programming Languages and Systems*, 32(5):16:1–16:49, May 2010. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [KSK07] **Khedker:2007:HRA**
Uday P. Khedker, Amitabha Sanyal, and Amey Karkare. Heap reference analysis using access graphs. *ACM Transactions on Programming Languages and Systems*, 30(1):1:1–1:41, November 2007. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [KSV96] **Knoop:1996:PFE**
Jens Knoop, Bernhard Steffen, and Jürgen Vollmer. Parallelism for free: efficient and optimal bitvector analyses for parallel programs. *ACM Transactions on Programming Languages and Systems*, 18(3):268–299, May 1996. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/229545.html>.
- [KTU93] **Kfoury:1993:TRP**
A. J. Kfoury, J. Tiuryn, and P. Urzyczyn. Type recursion in the presence of polymorphic recursion. *ACM Transactions on Programming Languages and Systems*, 15(2):290–311, April 1993. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/169687.html>.
- [KV00] **Kuperman:2000:ATA**
Orna Kuperman and Moshe Y. Vardi. An automata-theoretic approach to modular model checking. *ACM Transactions on Programming Languages and Systems*, 22(1):87–128, January 2000. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/citations/journals/toplas/2000-22-1/p87-kuperman/>.
- [KWL09] **Kalvala:2009:PTU**
Sara Kalvala, Richard Warburton, and David Lacey. Program transformations using temporal logic side conditions. *ACM Transactions on Programming Languages and Systems*, 31(4):14:1–14:48, May 2009. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [KZC15] **Kasikci:2015:ACD**
Baris Kasikci, Cristian Zamfir, and George Candea. Automated classification of data races under both strong and weak memory models. *ACM Transactions on Programming Languages and Systems*, 37(3):8:1–8:??, June 2015. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).

- LaLonde:1981:CSC**
- [LaL81] Wilf R. LaLonde. The construction of stack-controlling LR parsers for regular right part grammars. *ACM Transactions on Programming Languages and Systems*, 3(2):168–206, April 1981. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- LaLonde:1983:TCL**
- [LaL83] Wilf R. LaLonde. Technical correspondence: LaLonde’s reply. *ACM Transactions on Programming Languages and Systems*, 5(1):122, January 1983. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). See [LdR81, Hen83].
- LaLonde:1984:TCC**
- [LaL84] Wilf R. LaLonde. Technical correspondence: Comments on Soisalon-Soininen’s “Inessential Error Entries and Their Use in LR Parser Optimization”. *ACM Transactions on Programming Languages and Systems*, 6(3):432–439, July 1984. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). See [SS82].
- LaLonde:1989:DFD**
- [LaL89] Wilf R. LaLonde. Designing families of data types using exemplars. *ACM Transactions on Programming Languages and Systems*, 11(2):212–248, April 1989. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/63265.html>.
- Lamport:1979:NAP**
- [Lam79] Leslie Lamport. A new approach to proving the correctness of multiprocess programs. *ACM Transactions on Programming Languages and Systems*, 1(1):84–97, July 1979. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). See also corrigendum [Lam80].
- Lamport:1980:CNA**
- [Lam80] Leslie Lamport. Corrigendum: “A New Approach to Proving the Correctness of Multiprocess Programs”. *ACM Transactions on Programming Languages and Systems*, 2(1):134, January 1980. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). See [Lam79].
- Lamport:1983:SCP**
- [Lam83] Leslie Lamport. Specifying concurrent program modules. *ACM Transactions on Programming Languages and Systems*, 5(2):190–222, April 1983. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- Lamport:1984:UTI**
- [Lam84] Leslie Lamport. Using time instead of timeout for fault-tolerant distributed systems. *ACM Transactions on Programming Languages and Systems*, 6

- (2):254–280, April 1984. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). [Lam94]
- Lamb:1987:ISI**
- [Lam87] David Alex Lamb. IDL: Sharing intermediate representations. *ACM Transactions on Programming Languages and Systems*, 9(3):297–318, July 1987. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/24040.html>. [Lan80]
- Lampert:1988:CPB**
- [Lam88] Leslie Lamport. Control predicates are better than dummy variables for reasoning about program control. *ACM Transactions on Programming Languages and Systems*, 10(2):267–281, April 1988. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/42348.html>. [Lar95]
- Lampert:1990:WSP**
- [Lam90] Leslie Lamport. *win* and *sin*: Predicate transformers for concurrency. *ACM Transactions on Programming Languages and Systems*, 12(3):396–428, July 1990. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/78970.html>. [LB22]
- Lampert:1994:TLA**
- Leslie Lamport. The temporal logic of actions. *ACM Transactions on Programming Languages and Systems*, 16(3):872–923, May 1994. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/177726.html>.
- Landwehr:1980:ATS**
- Carl E. Landwehr. An abstract type for statistics collection in Simula. *ACM Transactions on Programming Languages and Systems*, 2(4):544–563, October 1980. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- Larcheveque:1995:OIP**
- J.-M. Larchevêque. Optimal incremental parsing. *ACM Transactions on Programming Languages and Systems*, 17(1):1–15, January 1995. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/200996.html>.
- Lahav:2022:WDA**
- Ori Lahav and Udi Boker. What’s decidable about causally consistent shared memory? *ACM Transactions on Programming Languages and Systems*, 44(2):8:1–8:55, June 2022. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (elec-

- tronic). URL <https://dl.acm.org/doi/10.1145/3505273>.
- [LBM+22] Meven Lennon-Bertrand, Kenji Maillard, Nicolas Tabareau, and Éric Tanter. Gradualizing the calculus of inductive constructions. *ACM Transactions on Programming Languages and Systems*, 44(2): 7:1–7:82, June 2022. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <https://dl.acm.org/doi/10.1145/3495528>.
- [LBN17] Jay Ligatti, Jeremy Blackburn, and Michael Nachtigal. On subtyping-relation completeness, with an application to iso-recursive types. *ACM Transactions on Programming Languages and Systems*, 39(1):4:1–4:??, March 2017. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [LCBS19] Roberto Castañeda Lozano, Mats Carlsson, Gabriel Hjort Blindell, and Christian Schulte. Combinatorial register allocation and instruction scheduling. *ACM Transactions on Programming Languages and Systems*, 41(3):17:1–17:??, July 2019. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL https://dl.acm.org/ft_gateway.cfm?id=3332373.
- [LCK+22] Jacob R. Lorch, Yixuan Chen, Manos Kapritsos, Haojun Ma, Bryan Parno, Shaz Qadeer, Upamanyu Sharma, James R. Wilcox, and Xueyuan Zhao. Armada: Automated verification of concurrent code with sound semantic extensibility. *ACM Transactions on Programming Languages and Systems*, 44(2): 12:1–12:39, June 2022. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <https://dl.acm.org/doi/10.1145/3502491>.
- [LDK+96] Stan Liao, Srinivas Devadas, Kurt Keutzer, Steven Tjiang, and Albert Wang. Storage assignment to decrease code size. *ACM Transactions on Programming Languages and Systems*, 18(3):235–253, May 1996. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/229543.html>.
- [LDM07] Han B. Lee, Amer Diwan, and J. Eliot B. Moss. Design, implementation, and evaluation of a compilation server. *ACM Transactions on Programming Languages and Systems*, 29(4): 18:1–18:40, August 2007. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).

Lorch:2022:AAV**Lennon-Bertrand:2022:GCI****Ligatti:2017:SRC****Liao:1996:SAD****Lozano:2019:CRA****Lee:2007:DIE**

- [LdR81] **LaLonde:1981:HOP**
 Wilf R. LaLonde and Jim des Rivieres. Handling operator precedence in arithmetic expressions with tree transformations. *ACM Transactions on Programming Languages and Systems*, 3(1):83–103, January 1981. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). See remarks [Hen83, LaL83].
- [Le 88] **LeMetayer:1988:AAC**
 Daniel Le Métayer. ACE: An automatic complexity evaluator. *ACM Transactions on Programming Languages and Systems*, 10(2):248–266, April 1988. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/42347.html>.
- [Lee86] **Leeman:1986:FAU**
 George B. Leeman, Jr. A formal approach to undo operations in programming languages. *ACM Transactions on Programming Languages and Systems*, 8(1):50–87, January 1986. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/5005.html>.
- [Lee09] **Lee:2009:RFS**
 Chin Soon Lee. Ranking functions for size-change termination. *ACM Transactions on Programming Languages and Systems*, 31(3):10:1–10:42, April 2009. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [Lei90] **Leiss:1990:KME**
 Hans Leiss. On Kilbury’s modification of Earley’s algorithm. *ACM Transactions on Programming Languages and Systems*, 12(4):610–640, October 1990. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/88637.html>.
- [Leu04] **Leuschel:2004:FIP**
 Michael Leuschel. A framework for the integration of partial evaluation and abstract interpretation of logic programs. *ACM Transactions on Programming Languages and Systems*, 26(3):413–463, May 2004. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [LFF14] **Liang:2014:RGB**
 Hongjin Liang, Xinyu Feng, and Ming Fu. Rely-guarantee-based simulation for compositional verification of concurrent program transformations. *ACM Transactions on Programming Languages and Systems*, 36(1):3:1–3:??, March 2014. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [LGAT00] **Lueh:2000:FBR**
 Guei-Yuan Lueh, Thomas Gross, and Ali-Reza Adl-Tabatabai. Fusion-based register allocation. *ACM Transactions on*

- Programming Languages and Systems*, 22(3):431–470, 2000. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/articles/journals/toplas/2000-22-3/p431-lueh/p431-lueh.pdf>; <http://www.acm.org/pubs/citations/journals/toplas/2000-22-3/p431-lueh/>.
- [LH91] Edward A. Lycklama and Vassos Hadzilacos. A first-come-first-served mutual-exclusion algorithm with small communication variables. *ACM Transactions on Programming Languages and Systems*, 13(4):558–576, October 1991. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/115370.html>.
- [LH08] Ondřej Lhoták and Laurie Hendren. Relations as an abstraction for BDD-based program analysis. *ACM Transactions on Programming Languages and Systems*, 30(4):19:1–19:63, July 2008. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [LHR19] Bozhen Liu, Jeff Huang, and Lawrence Rauchwerger. Rethinking incremental and parallel pointer analysis. *ACM Transactions on Programming Languages and Systems*, 41(1):6:1–6:??, March 2019. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [Lin59] Gary Lindstrom. Backtracking in a generalized control setting. *ACM Transactions on Programming Languages and Systems*, 1(1):8–26, July 1979. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [Lin93] Huimin Lin. Procedural implementation of algebraic specification. *ACM Transactions on Programming Languages and Systems*, 15(5):876–895, November 1993. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/161473.html>.
- [LJ99] Zhiming Liu and Mathai Joseph. Specification and verification of fault-tolerance, timing, and scheduling. *ACM Transactions on Programming Languages and Systems*, 21(1):46–89, January 1999. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/citations/journals/toplas/1999-21-1/p46-liu/>.

Lindstrom:1979:BGC

Lycklama:1991:FCF

Lin:1993:PIA

Lhotak:2008:RAB

Liu:1999:SVF

Liu:2019:RIP

- [LK02] Peizong Lee and Zvi Meir Kedem. Automatic data and computation decomposition on distributed memory parallel computers. *ACM Transactions on Programming Languages and Systems*, 24(1):1–50, January 2002. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). **Lee:2002:ADC**
- [LLK⁺17] Woosuk Lee, Wonchan Lee, Dongok Kang, Kihong Heo, Hakjoo Oh, and Kwangkeun Yi. Sound non-statistical clustering of static analysis alarms. *ACM Transactions on Programming Languages and Systems*, 39(4):16:1–16:??, September 2017. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). **Lee:2017:SNS**
- [LM18] Jacob Lidman and Sally A. McKeek. Verifying reliability properties using the hyperball abstract domain. *ACM Transactions on Programming Languages and Systems*, 40(1):3:1–3:??, January 2018. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). **Lidman:2018:VRP**
- [LM22] Leslie Lamport and Stephan Merz. Prophecy made simple. *ACM Transactions on Programming Languages and Systems*, 44(2):6:1–6:27, June 2022. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). **Lampport:2022:PMS**
- [LMD98] Michael Leuschel, Bern Martens, and Danny De Schreye. Controlling generalization and polyvariance in partial deduction of normal logic programs. *ACM Transactions on Programming Languages and Systems*, 20(1):208–258, January 1998. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/toplas/1998-20-1/p208-leuschel/>. **Leuschel:1998:CGP**
- [LMM21] Lun Liu, Todd Millstein, and Madanlal Musuvathi. Safe-by-default concurrency for modern programming languages. *ACM Transactions on Programming Languages and Systems*, 43(3):10:1–10:50, September 2021. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <https://dl.acm.org/doi/10.1145/3462206>. **Liu:2021:SDC**
- [LN02] K. Rustan M. Leino and Greg Nelson. Data abstraction and information hiding. *ACM Transactions on Programming Languages and Systems*, 24(5):491–553, September 2002. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). **Leino:2002:DAI**

- [LN15] **Leavens:2015:BSS**
 Gary T. Leavens and David A. Naumann. Behavioral subtyping, specification inheritance, and modular reasoning. *ACM Transactions on Programming Languages and Systems*, 37(4): 13:1–13:??, August 2015. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [LO94] **Laufer:1994:PTI**
 Konstantin Läufer and Martin Odersky. Polymorphic type inference and abstract data types. *ACM Transactions on Programming Languages and Systems*, 16(5):1411–1430, September 1994. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/186031.html>.
- [Loc13] **Lochbihler:2013:MJM**
 Andreas Lochbihler. Making the Java memory model safe. *ACM Transactions on Programming Languages and Systems*, 35(4):12:1–12:??, December 2013. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [Loe87] **Loeckx:1987:ASC**
 Jacques Loeckx. Algorithmic specifications: a constructive specification method for abstract data types. *ACM Transactions on Programming Languages and Systems*, 9(4):646–685, October 1987. CODEN
- [LP80] **Luckham:1980:AEH**
 David C. Luckham and W. Polak. Ada exception handling: an axiomatic approach. *ACM Transactions on Programming Languages and Systems*, 2(2): 225–233, April 1980. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [LP99] **Lamport:1999:SYS**
 Leslie Lamport and Lawrence C. Paulson. Should your specification language be typed. *ACM Transactions on Programming Languages and Systems*, 21(3):502–526, May 1999. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/articles/journals/toplas/1999-21-3/p502-lamport/p502-lamport.pdf>; <http://www.acm.org/pubs/citations/journals/toplas/1999-21-3/p502-lamport/>.
- [LP00] **Leroy:2000:TBA**
 Xavier Leroy and François Pessaux. Type-based analysis of uncaught exceptions. *ACM Transactions on Programming Languages and Systems*, 22(2): 340–377, March 2000. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/>
- ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/30399.html>.

pubs/citations/journals/toplas/2000-22-2/p340-leroy/.

Levanoni:2006:FRC

- [LP06] Yossi Levanoni and Erez Petrank. An on-the-fly reference-counting garbage collector for Java. *ACM Transactions on Programming Languages and Systems*, 28(1):1–69, January 2006. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).

Leung:2001:STC

- [LPP01] Allen Leung, Krishna V. Palem, and Amir Pnueli. Scheduling time-constrained instructions on pipelined processors. *ACM Transactions on Programming Languages and Systems*, 23(1):73–103, January 2001. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).

Lieberherr:2004:TOS

- [LPSO04] Karl Lieberherr, Boaz Patt-Shamir, and Doug Orleans. Traversals of object structures: Specification and efficient implementation. *ACM Transactions on Programming Languages and Systems*, 26(2):370–412, March 2004. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).

Lim:2013:TSG

- [LR13] Junghee Lim and Thomas Reps. TSL: a system for generating abstract interpreters and its application to machine-code analysis.

ACM Transactions on Programming Languages and Systems, 35(1):4:1–4:??, April 2013. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).

Lepigre:2019:PSC

- [LR19] Rodolphe Lepigre and Christophe Raffalli. Practical subtyping for Curry-style languages. *ACM Transactions on Programming Languages and Systems*, 41(1):5:1–5:??, March 2019. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).

Luckham:1979:VAR

- [LS79] David C. Luckham and Norihisa Suzuki. Verification of array, record, and pointer operations in Pascal. *ACM Transactions on Programming Languages and Systems*, 1(2):226–244, October 1979. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).

Leverett:1980:CSD

- [LS80] Bruce W. Leverett and Thomas G. Szymanski. Chaining span-dependent jump instructions. *ACM Transactions on Programming Languages and Systems*, 2(3):274–289, July 1980. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).

Lindstrom:1981:RRB

- [LS81] Gary Lindstrom and Mary Lou Soffa. Referencing and retention in block-structured coroutines. *ACM Transactions on Programming Languages and Systems*, 3

- (3):263–292, July 1981. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). [LS03]
- Liskov:1983:GAL**
- [LS83] Barbara Liskov and Robert Scheifler. Guardians and actions: Linguistic support for robust, distributed programs. *ACM Transactions on Programming Languages and Systems*, 5(3):381–404, July 1983. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). [LS04]
- Lampport:1984:HLC**
- [LS84] Leslie Lamport and Fred B. Schneider. The “Hoare logic” of CSP, and all that. *ACM Transactions on Programming Languages and Systems*, 6(2):281–296, April 1984. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). [LS08]
- Lang:1998:SAE**
- [LS98] Jun Lang and David B. Stewart. A study of the applicability of existing exception-handling techniques to component-base real-time software technology. *ACM Transactions on Programming Languages and Systems*, 20(2):274–301, March 1998. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/toplas/1998-20-2/p274-lang/>. [LSLR05]
- Levi:2003:MSA**
- Francesca Levi and Davide Sangiorgi. Mobile safe ambients. *ACM Transactions on Programming Languages and Systems*, 25(1):1–69, January 2003. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- Li:2004:ATI**
- Zhiyuan Li and Yonghong Song. Automatic tiling of iterative stencil loops. *ACM Transactions on Programming Languages and Systems*, 26(6):975–1028, November 2004. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- Liquori:2008:FME**
- Luigi Liquori and Arnaud Spiwack. FeatherTrait: a modest extension of Featherweight Java. *ACM Transactions on Programming Languages and Systems*, 30(2):11:1–11:32, March 2008. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- Liu:2009:DRE**
- [LS09] Yanhong A. Liu and Scott D. Stoller. From datalog rules to efficient programs with time and space guarantees. *ACM Transactions on Programming Languages and Systems*, 31(6):21:1–21:38, August 2009. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- Liu:2005:OAA**
- [LSLR05] Yanhong A. Liu, Scott D. Stoller, Ning Li, and Tom

- Rothamel. Optimizing aggregate array computations in loops. *ACM Transactions on Programming Languages and Systems*, 27(1):91–125, January 2005. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). [LST02]
- [LSP82] Leslie Lamport, Robert Shostak, and Marshall Pease. The Byzantine generals problem. *ACM Transactions on Programming Languages and Systems*, 4(3):382–401, July 1982. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). They proved that Byzantine agreement (the subject of Section ??) cannot be reached unless fewer than one-third of the processes are faulty. This result assumes that authentication, i.e., the crypting of messages to make them unforgeable, is not used. With unforgeable messages, they show that the problem is solvable for any $n \geq t > 0$, where n is the total number of processes and t is the number of faulty processes.
- [LST98] Yanhong A. Liu, Scott D. Stoller, and Tim Teitelbaum. Static caching for incremental computation. *ACM Transactions on Programming Languages and Systems*, 20(3):546–585, May 1998. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/toplas/1998-20-3/p546-liu/>.
- [LST02] Christopher League, Zhong Shao, and Valery Trifonov. Type-preserving compilation of Featherweight Java. *ACM Transactions on Programming Languages and Systems*, 24(2):112–152, March 2002. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [LT79] Thomas Lengauer and Robert Endre Tarjan. A fast algorithm for finding dominators in a flowgraph. *ACM Transactions on Programming Languages and Systems*, 1(1):121–141, July 1979. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [LTMS20] Yue Li, Tian Tan, Anders Møller, and Yannis Smaragdakis. A principled approach to selective context sensitivity for pointer analysis. *ACM Transactions on Programming Languages and Systems*, 42(2):10:1–10:40, May 2020. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <https://dl.acm.org/doi/abs/10.1145/3381915>.
- [LV94] Baudouin Le Charlier and Pascal Van Hentenryck. Experimenten-

Lamport:1982:BGP

League:2002:TPC

Lengauer:1979:FAF

Liu:1998:SCI

Li:2020:PAS

LeCharlier:1994:EEG

- tal evaluation of a generic abstract interpretation algorithm for PROLOG. *ACM Transactions on Programming Languages and Systems*, 16(1):35–101, January 1994. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/174627.html>. [LW94]
- [LVRG21] **Lobo-Vesga:2021:PLD**
 Elisabet Lobo-Vesga, Alejandro Russo, and Marco Gaboardi. A programming language for data privacy with accuracy estimations. *ACM Transactions on Programming Languages and Systems*, 43(2):6:1–6:42, July 2021. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <https://dl.acm.org/doi/10.1145/3452096>. [LWR21]
- [LVV⁺83] **Lipton:1983:VLP**
 Richard J. Lipton, Jacobo Valdes, Gopalakrishnan Vijayan, Stephen C. Notth, and Robert Sedgewick. VLSI layout as programming. *ACM Transactions on Programming Languages and Systems*, 5(3):405–421, July 1983. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). [LY98]
- [LW93] **Leivent:1993:MFT**
 Jonathan I. Leivent and Ronald J. Watro. Mathematical foundations for Time Warp systems. *ACM Transactions on Programming Languages and Systems*, 15(5):771–794, November 1993. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/161470.html>. **Liskov:1994:BNS**
- B. H. Liskov and J. M. Wing. A behavioral notion of subtyping. *ACM Transactions on Programming Languages and Systems*, 16(6):1811–1841, November 1994. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/197383.html>. **Liu:2021:ICU**
- Peizun Liu, Thomas Wahl, and Thomas Reps. Interprocedural context-unbounded program analysis using observation sequences. *ACM Transactions on Programming Languages and Systems*, 42(4):16:1–16:34, February 2021. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <https://dl.acm.org/doi/10.1145/3418583>. **Lee:1998:PAF**
- Oukseh Lee and Kwangkeun Yi. Proofs about a folklore let-polymorphic type inference algorithm. *ACM Transactions on Programming Languages and Systems*, 20(4):707–723, July 1998. CODEN ATPSDT. ISSN

- 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/toplas/1998-20-4/p707-lee/>.
- Li:2022:FGS**
- [LZR22] Yuanbo Li, Qirun Zhang, and Thomas Reps. Fast graph simplification for interleaved-Dyck reachability. *ACM Transactions on Programming Languages and Systems*, 44(2):11:1–11:28, June 2022. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <https://dl.acm.org/doi/10.1145/3492428>.
- Mallgren:1982:FSG**
- [Mal82] William R. Mallgren. Formal specification of graphic data types. *ACM Transactions on Programming Languages and Systems*, 4(4):687–710, October 1982. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- Merlin:1983:CSS**
- [MB83] Philip Merlin and Gregor V. Bochmann. On the construction of submodule specifications and communication protocols. *ACM Transactions on Programming Languages and Systems*, 5(1):1–25, January 1983. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- Morris:1999:SF**
- [MB99] J. M. Morris and A. Bunkenburg. Specificational func-
- tions. *ACM Transactions on Programming Languages and Systems*, 21(3):677–701, May 1999. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/articles/journals/toplas/1999-21-3/p677-morris/p677-morris.pdf>; <http://www.acm.org/pubs/citations/journals/toplas/1999-21-3/p677-morris/>.
- Millstein:2004:MTH**
- [MBC04] Todd Millstein, Colin Bleckner, and Craig Chambers. Modular typechecking for hierarchically extensible datatypes and functions. *ACM Transactions on Programming Languages and Systems*, 26(5):836–889, September 2004. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- Morris:2009:TTN**
- [MBT09] Joseph M. Morris, Alexander Bunkenburg, and Malcolm Tyrrell. Term transformers: a new approach to state. *ACM Transactions on Programming Languages and Systems*, 31(4):16:1–16:42, May 2009. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- Misra:1982:DGA**
- [MC82a] Jayadev Misra and K. M. Chandy. A distributed graph algorithm: Knot detection. *ACM Transactions on Programming Languages and Systems*, 4(4):678–686, October 1982. CO-

- DEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [MC82b] Jayadev Misra and K. M. Chandy. Termination detection of diffusing computations in communicating sequential processes. *ACM Transactions on Programming Languages and Systems*, 4(1):37–43, January 1982. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [McG82] James R. McGraw. The VAL language: Description and analysis. *ACM Transactions on Programming Languages and Systems*, 4(1):44–82, January 1982. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [MCT96] Kathryn S. McKinley, Steve Carr, and Chau-Wen Tseng. Improving data locality with loop transformations. *ACM Transactions on Programming Languages and Systems*, 18(4):424–453, July 1996. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/toplas/233564.html>.
- [MDCB91] R. Morrison, A. Dearle, R. C. H. Connor, and A. L. Brown. An ad hoc approach to the implementation of polymorphism. *ACM Transactions on Programming Languages and Systems*, 10(3):456–469, July 1988. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/117017.html>.
- [MDJ05] Luc Moreau, Peter Dickman, and Richard Jones. Birrell’s distributed reference listing revisited. *ACM Transactions on Programming Languages and Systems*, 27(6):1344–1395, November 2005. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [ME97] Soo-Mook Moon and Kemal Ebcioglu. Parallelizing non-numerical code with selective scheduling and software pipelining. *ACM Transactions on Programming Languages and Systems*, 19(6):853–898, November 1997. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/toplas/1997-19-6/p853-moon/>.
- [MF88] Jon Mauney and Charles N. Fischer. Determining the extent of lookahead in syntactic error repair. *ACM Transactions on Programming Languages and Systems*, 10(3):456–469, July 1988. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).

- ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/44505.html>. [MH04]
- Matthews:2009:OSM**
- [MF09] Jacob Matthews and Robert Bruce Findler. Operational semantics for multi-language programs. *ACM Transactions on Programming Languages and Systems*, 31(3):12:1–12:44, April 2009. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). [MH06]
- Millstein:2009:EMP**
- [MFRW09] Todd Millstein, Christopher Frost, Jason Ryder, and Alessandro Warth. Expressive and modular predicate dispatch for Java. *ACM Transactions on Programming Languages and Systems*, 31(2):7:1–7:54, February 2009. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). [Mil85]
- Moriconi:1986:PSP**
- [MH86] Mark Moriconi and Dwight Hare. The PegaSys system: Pictures as formal documentation of large programs. *ACM Transactions on Programming Languages and Systems*, 8(4):524–546, October 1986. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/6478.html>.
- Mirani:2004:FCM**
- Rajiv Mirani and Paul Hudak. First-class monadic schedules. *ACM Transactions on Programming Languages and Systems*, 26(4):609–651, July 2004. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- Merro:2006:BBS**
- Massimo Merro and Matthew Hennessy. A bisimulation-based semantic theory of Safe Ambients. *ACM Transactions on Programming Languages and Systems*, 28(2):290–330, March 2006. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- Milne:1985:CRC**
- George J. Milne. CIRCAL and the representation of communication, concurrency, and time. *ACM Transactions on Programming Languages and Systems*, 7(2):270–298, April 1985. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/3322.html>.
- Minsky:1984:SLC**
- Naftaly H. Minsky. Selective and locally controlled transport of privileges. *ACM Transactions on Programming Languages and Systems*, 6(4):573–602, October 1984. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).

- [Miq19] Étienne Miquey. A classical sequent calculus with dependent types. *ACM Transactions on Programming Languages and Systems*, 41(2):8:1–8:??, June 2019. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL https://dl.acm.org/ft_gateway.cfm?id=3230625. **Miquey:2019:CSC**
- [Mis81] Jayadev Misra. An exercise in program explanation. *ACM Transactions on Programming Languages and Systems*, 3(1):104–109, January 1981. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). **Misra:1981:EPE**
- [Mis86] Jayadev Misra. Axioms for memory access in asynchronous hardware systems. *ACM Transactions on Programming Languages and Systems*, 8(1):142–153, January 1986. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/5007.html>. **Misra:1986:AMA**
- [Mis94] J. Misra. Powerlist: a structure for parallel recursion. *ACM Transactions on Programming Languages and Systems*, 16(6):1737–1767, November 1994. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). **Misra:1994:PSP**
- [MK94] Josephine Micallef and Gail E. Kaiser. Extending attribute grammars to support programming-in-the-large. *ACM Transactions on Programming Languages and Systems*, 16(5):1572–1612, September 1994. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/186091.html>. **Micallef:1994:EAG**
- [ML80] Perng-Ti Ma and T. G. Lewis. Design of a machine-independent optimizing system for emulator development. *ACM Transactions on Programming Languages and Systems*, 2(2):239–262, April 1980. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). **Ma:1980:DMI**
- [ML21] Abu Naser Masud and Björn Lisper. Semantic correctness of dependence-based slicing for interprocedural, possibly non-terminating programs. *ACM Transactions on Programming Languages and Systems*, 42(4):19:1–19:56, February 2021. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <https://dl.acm.org/doi/10.1145/3434489>. **Masud:2021:SCD**
- URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/197356.html>.

- [MM82] **Martelli:1982:EUA**
 Alberto Martelli and Ugo Montanari. An efficient unification algorithm. *ACM Transactions on Programming Languages and Systems*, 4(2):258–282, February 1982. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [MM89] **Myers:1989:RRA**
 Eugene W. Myers and Webb Miller. Row replacement algorithms for screen editors. *ACM Transactions on Programming Languages and Systems*, 11(1):33–56, January 1989. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/59290.html>.
- [MME⁺10] **Markstrum:2010:JDP**
 Shane Markstrum, Daniel Marino, Matthew Esquivel, Todd Millstein, Chris Andreae, and James Noble. JavaCOP: Declarative pluggable types for Java. *ACM Transactions on Programming Languages and Systems*, 32(2):4:1–4:37, January 2010. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [MMG92] **Morzenti:1992:MPR**
 Angelo Morzenti, Dino Mandrioli, and Carlo Ghezzi. A model parametric real-time logic. *ACM Transactions on Programming Languages and Systems*, 14(4):521–573, October 1992. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/129397.html>.
- [MMG00] **Moreira:2000:FMJ**
 José E. Moreira, Samuel P. Midkiff, and Manish Gupta. From flop to megaflops: Java for technical computing. *ACM Transactions on Programming Languages and Systems*, 22(2):265–295, March 2000. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/citations/journals/toplas/2000-22-2/p265-moreira/>.
- [MMM⁺07] **Marathe:2007:MMT**
 Jaydeep Marathe, Frank Mueller, Tushar Mohan, Sally A. McKeck, Bronis R. De Supinski, and Andy Yoo. METRIC: Memory tracing via dynamic binary rewriting to identify cache inefficiencies. *ACM Transactions on Programming Languages and Systems*, 29(2):12:1–12:36, April 2007. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [MMR95] **Masticola:1995:LFM**
 Stephen P. Masticola, Thomas J. Marlowe, and Barbara G. Ryder. Lattice frameworks for multi-source and bidirectional data flow problems. *ACM Transactions on Programming Languages and Systems*, 17(5):777–803, September 1995. CODEN ATPSDT. ISSN 0164-0925

(print), 1558-4593 (electronic).
 URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/> [Mon08] 213989.html.

Morgan:1996:PPT

[MMS96] Carroll Morgan, Annabelle McIver, and Karen Seidel. Probabilistic predicate transformers. *ACM Transactions on Programming Languages and Systems*, 18(3):325–353, May 1996. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/> 229547.html. [Mor88]

Mohan:1981:TCF

[Moh81] C. Mohan. Technical correspondence: On Francez’s “Distributed Termination”. *ACM Transactions on Programming Languages and Systems*, 3(1):112, January 1981. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). See [Fra80b, Fra81]. [MOS07a]

Moitra:1983:TCA

[Moi83] Abha Moitra. Technical correspondence: On Apt, Francez, and de Roever’s “A Proof System for Communicating Sequential Processes”. *ACM Transactions on Programming Languages and Systems*, 5(3):500–501, July 1983. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). See [AFdR80]. [MOS07b]

Monniaux:2008:PVF

David Monniaux. The pitfalls of verifying floating-point computations. *ACM Transactions on Programming Languages and Systems*, 30(3):12:1–12:41, May 2008. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).

Morgan:1988:SS

Carroll Morgan. The specification statement. *ACM Transactions on Programming Languages and Systems*, 10(3):403–419, July 1988. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/> 44503.html.

Moller:2007:SVX

Anders Møller, Mads Østerby Olesen, and Michael I. Schwartzbach. Static validation of XSL transformations. *ACM Transactions on Programming Languages and Systems*, 29(4):21:1–21:47, August 2007. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).

Muller-Olm:2007:AMA

Markus Müller-Olm and Helmut Seidl. Analysis of modular arithmetic. *ACM Transactions on Programming Languages and Systems*, 29(5):29:1–29:27, August 2007. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).

- [MOSS96] **Murer:1996:IAS**
 Stephan Murer, Stephen Omohundro, David Stoutamire, and Clemens Szyperski. Iteration abstraction in Sather. *ACM Transactions on Programming Languages and Systems*, 18(1): 1–15, January 1996. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/225541.html>.
- [MP88] **Mitchell:1988:ATE**
 John C. Mitchell and Gordon D. Plotkin. Abstract types have existential type. *ACM Transactions on Programming Languages and Systems*, 10(3): 470–502, July 1988. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/45065.html>. Preliminary version appeared in *Proc. 12th ACM Symp. on Principles of Programming Languages*, 1985.
- [MP02] **Moore:2002:AC**
 J. Strother Moore and George Porter. The apprentice challenge. *ACM Transactions on Programming Languages and Systems*, 24(3):193–216, May 2002. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [MP07] **McKinley:2007:ECG**
 Kathryn S. McKinley and Keshav Pingali. Editorial: a changing of the guard. *ACM Transactions on Programming Languages and Systems*, 29(6): 30:1–30:2, October 2007. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [MP10a] **Mckinley:2010:DVT**
 Kathryn S. McKinley and Keshav Pingali. La dolce vita at TOPLAS. *ACM Transactions on Programming Languages and Systems*, 32(4):10:1–10:6, April 2010. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [MP10b] **Mckinley:2010:PVT**
 Kathryn S. McKinley and Keshav Pingali. La prossima vita at TOPLAS. *ACM Transactions on Programming Languages and Systems*, 32(6):20:1, August 2010. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [MPM03] **Menon:2003:FSA**
 Vijay Menon, Keshav Pingali, and Nikolay Mateev. Fractal symbolic analysis. *ACM Transactions on Programming Languages and Systems*, 25(6):776–813, November 2003. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [MQ05] **Moreau:2005:RAP**
 Luc Moreau and Christian Queinnec. Resource aware programming. *ACM Transactions on Programming Languages and Systems*, 27(3):441–476, May

2005. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).

Morgan:1988:RC

- [MRG88] C. C. Morgan, K. A. Robinson, and P. H. B. Gardiner. On the refinement calculus. Technical Monograph PRG-70, Oxford University Computing Laboratory, Wolfson Building, Parks Road, Oxford, UK, October 1988. ISBN 0-902928-52-X.

Melo:2020:TIC

- [MRGP20] Leandro T. C. Melo, Rodrigo G. Ribeiro, Breno C. F. Guimarães, and Fernando Magno Quintão Pereira. Type inference for C: Applications to the static analysis of incomplete programs. *ACM Transactions on Programming Languages and Systems*, 42(3):15:1–15:71, December 2020. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <https://dl.acm.org/doi/10.1145/3421472>.

Maher:1983:API

- [MS83] B. Maher and D. H. Sleeman. Automatic program improvement: Variable usage transformations. *ACM Transactions on Programming Languages and Systems*, 5(2):236–264, April 1983. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).

Murphy:1988:NDP

- [MS88] Sandra L. Murphy and A. Udaya Shankar. A note on the drink-

ing philosophers problem (technical correspondence). *ACM Transactions on Programming Languages and Systems*, 10(1):178–188, January 1988. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).

Marriott:1994:DAI

- [MSJ94] Kim Marriott, Harald Søndergaard, and Neil D. Jones. Denotational abstract interpretation of logic programs. *ACM Transactions on Programming Languages and Systems*, 16(3):607–648, May 1994. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/177650.html>.

Marino:2016:DXU

- [MSM⁺16] Daniel Marino, Abhayendra Singh, Todd Millstein, Madanlal Musuvathi, and Satish Narayanasamy. drf x: an understandable, high performance, and flexible memory model for concurrent languages. *ACM Transactions on Programming Languages and Systems*, 38(4):16:1–16:??, October 2016. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).

Madhavan:2000:EGG

- [MSRR00] Maya Madhavan, Priti Shankar, Siddhartha Rai, and U. Ramakrishna. Extending Graham-Glanville techniques for optimal code generation. *ACM Transactions on Programming Lan-*

- guages and Systems*, 22(6):973–1001, 2000. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/articles/journals/toplas/2000-22-6/p973-madhavan/p973-madhavan.pdf>; <http://www.acm.org/pubs/citations/journals/toplas/2000-22-6/p973-madhavan/>. [MTSS09]
- Morris:2008:DNF**
- [MT08] Joseph M. Morris and Malcolm Tyrrell. Dually nondeterministic functions. *ACM Transactions on Programming Languages and Systems*, 30(6):34:1–34:34, October 2008. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- Moret:1980:AVR**
- [MTG80] B. M. E. Moret, M. G. Thomson, and R. C. Gonzalez. The activity of a variable and its relation to decision trees. *ACM Transactions on Programming Languages and Systems*, 2(4):580–595, October 1980. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- Matsushita:2021:RCB**
- [MTK21] Yusuke Matsushita, Takeshi Tsukada, and Naoki Kobayashi. RustHorn: CHC-based verification for Rust programs. *ACM Transactions on Programming Languages and Systems*, 43(4):15:1–15:54, December 2021. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (elec-
- tronic). URL <https://dl.acm.org/doi/10.1145/3462205>.
- MacDonald:2009:DDP**
- Steve MacDonald, Kai Tan, Jonathan Schaeffer, and Duane Szafron. Deferring design pattern decisions and automating structural pattern changes using a design-pattern-based programming system. *ACM Transactions on Programming Languages and Systems*, 31(3):9:1–9:49, April 2009. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- Muller:1992:MLR**
- [Mul92] Robert Muller. M-LISP: a representation-independent dialect of LISP with reduction semantics. *ACM Transactions on Programming Languages and Systems*, 14(4):589–616, October 1992. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/133254.html>.
- Muller:2021:ISS**
- [Mül21] Peter Müller. Introduction to the special section on ESOP 2020. *ACM Transactions on Programming Languages and Systems*, 43(4):13:1, December 2021. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <https://dl.acm.org/doi/10.1145/3484490>.

- Murtagh:1991:ISM**
- [Mur91] Thomas P. Murtagh. An improved storage management scheme for block structured languages. *ACM Transactions on Programming Languages and Systems*, 13(3):372–398, July 1991. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/117016.html>.
- Mueller:1987:RMS**
- [MV87] Robert A. Mueller and Joseph Varghese. Retargetable microcode synthesis. *ACM Transactions on Programming Languages and Systems*, 9(2):257–276, April 1987. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/23717.html>.
- Maassen:2001:EJR**
- [MVF⁺01] Jason Maassen, Rob Van Nieuwpoort, Ronald Veldema, Henri Bal, Thilo Kielmann, Cerial Jacobs, and Rutger Hofman. Efficient Java RMI for parallel programming. *ACM Transactions on Programming Languages and Systems*, 23(6):747–775, November 2001. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- Manna:1980:DAP**
- [MW80] Zohar Manna and Richard Waldinger. A deductive approach to program synthesis. *ACM Transactions on Programming Languages and Systems*, 2(1):90–121, January 1980. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- Manna:1984:SCP**
- [MW84] Zohar Manna and Pierre Wolper. Synthesis of communicating processes from temporal logic specifications. *ACM Transactions on Programming Languages and Systems*, 6(1):68–93, January 1984. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- Mulkers:1994:LSD**
- [MWB94] Anne Mulkers, William Winsborough, and Maurice Bruynooghe. Live-structure dataflow analysis for Prolog. *ACM Transactions on Programming Languages and Systems*, 16(2):205–258, March 1994. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/174664.html>.
- Morrisett:1999:SFT**
- [MWCG99] Greg Morrisett, David Walker, Karl Crary, and Neal Glew. From System F to typed assembly language. *ACM Transactions on Programming Languages and Systems*, 21(3):527–568, May 1999. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/>

- pubs/articles/journals/toplas/1999-21-3/p527-morrisett/p527-morrisett.pdf; <http://www.acm.org/pubs/citations/journals/toplas/1999-21-3/p527-morrisett/>.
- [MXZ⁺22] Darya Melicher, Anlun Xu, Valerie Zhao, Alex Potanin, and Jonathan Aldrich. Bounded abstract effects. *ACM Transactions on Programming Languages and Systems*, 44(1): 5:1–5:48, March 2022. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <https://dl.acm.org/doi/10.1145/3492427>.
- [MYD95] Bruce J. McKenzie, Corey Yeatman, and Lorraine De Vere. Error repair in shift-reduce parsers. *ACM Transactions on Programming Languages and Systems*, 17(4):672–689, July 1995. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/210193.html>. See failure report [BN99].
- [Mye90] Brad A. Myers. Creating user interfaces using programming by example, visual programming, and constraints. *ACM Transactions on Programming Languages and Systems*, 12(2): 143–177, April 1990. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/78943.html>.
- [Melicher:2022:BAE] Darya Melicher, Anlun Xu, Valerie Zhao, Alex Potanin, and Jonathan Aldrich. Bounded abstract effects. *ACM Transactions on Programming Languages and Systems*, 44(1): 5:1–5:48, March 2022. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <https://dl.acm.org/doi/10.1145/3492427>.
- [Mye17] Andrew Myers. Foreword. *ACM Transactions on Programming Languages and Systems*, 39(1): 1:1–1:??, March 2017. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [Mye18] Andrew Myers. Editor’s foreword to “Static Backward Slicing of Non-Deterministic Programs and Systems”. *ACM Transactions on Programming Languages and Systems*, 40(3): 11:1–11:??, August 2018. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). See [DL18].
- [Mye19] Andrew Myers. Editorial. *ACM Transactions on Programming Languages and Systems*, 41(2): 7:1–7:??, June 2019. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL https://dl.acm.org/ft_gateway.cfm?id=3324782.
- [NB99] Girija J. Narlikar and Guy E. Blelloch. Space-efficient scheduling of nested parallelism. *ACM Transactions on Programming Languages and Systems*, 21(1): 138–173, January 1999. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [Myers:2017:F] Andrew Myers. Foreword. *ACM Transactions on Programming Languages and Systems*, 39(1): 1:1–1:??, March 2017. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [Myers:2018:EFS] Andrew Myers. Editor’s foreword to “Static Backward Slicing of Non-Deterministic Programs and Systems”. *ACM Transactions on Programming Languages and Systems*, 40(3): 11:1–11:??, August 2018. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). See [DL18].
- [Myers:2019:E] Andrew Myers. Editorial. *ACM Transactions on Programming Languages and Systems*, 41(2): 7:1–7:??, June 2019. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL https://dl.acm.org/ft_gateway.cfm?id=3324782.
- [Narlikar:1999:SES] Girija J. Narlikar and Guy E. Blelloch. Space-efficient scheduling of nested parallelism. *ACM Transactions on Programming Languages and Systems*, 21(1): 138–173, January 1999. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).

- (print), 1558-4593 (electronic).
 URL <http://www.acm.org/pubs/citations/journals/toplas/1999-21-1/p138-narlikar/>.
- Nanevski:2013:DTT**
- [NBG13] Aleksandar Nanevski, Anindya Banerjee, and Deepak Garg. Dependent type theory for verification of information flow and access control policies. *ACM Transactions on Programming Languages and Systems*, 35(2):6:1–6:??, July 2013. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- Necula:2005:CTS**
- [NCH⁺05] George C. Necula, Jeremy Condit, Matthew Harren, Scott McPeak, and Westley Weimer. CCured: type-safe retrofitting of legacy software. *ACM Transactions on Programming Languages and Systems*, 27(3):477–526, May 2005. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- Narayanan:2020:SDV**
- [NcS20] Praveen Narayanan and Chungchieh Shan. Symbolic disintegration with a variety of base measures. *ACM Transactions on Programming Languages and Systems*, 42(2):9:1–9:60, May 2020. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <https://dl.acm.org/doi/abs/10.1145/3374208>.
- Norris:2016:PAM**
- Brian Norris and Brian Demsky. A practical approach for model checking C/C++11 code. *ACM Transactions on Programming Languages and Systems*, 38(3):10:1–10:??, May 2016. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- Nelson:1989:GDC**
- [Nel89] Greg Nelson. A generalization of Dijkstra’s calculus. *ACM Transactions on Programming Languages and Systems*, 11(4):517–561, October 1989. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/69559.html>.
- Nicholson:1989:DSP**
- [NF89] Tim Nicholson and Norman Foo. A denotational semantics for Prolog. *ACM Transactions on Programming Languages and Systems*, 11(4):650–665, October 1989. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/69564.html>. See also remarks in [FA93].
- Nguyen:2005:EEA**
- [NI05] Thi Viet Nga Nguyen and François Irigoien. Efficient and effective array bound checking. *ACM Transactions on Programming Languages and Systems*,

- 27(3):527–570, May 2005. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). [NO79]
- Nielson:1985:PTD**
- [Nie85] Flemming Nielson. Program transformations in a denotational setting. *ACM Transactions on Programming Languages and Systems*, 7(3):359–379, July 1985. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/3917.html>. [NP08]
- Nix:1985:EE**
- [Nix85] Robert P. Nix. Editing by example. *ACM Transactions on Programming Languages and Systems*, 7(4):600–621, October 1985. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). [NR06] URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/4476.html>.
- Nielson:1986:TCC**
- [NN86] Flemming Nielson and Hanne Riis Nielson. Technical correspondence: Comments on Georgeff’s “Transformations and Reduction Strategies for Typed Lambda Expressions”. *ACM Transactions on Programming Languages and Systems*, 8(3):406–407, July 1986. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/215007.html>. See [Geo84]. [NS13]
- Nelson:1979:SCD**
- Greg Nelson and Derek C. Oppen. Simplification by cooperating decision procedures. *ACM Transactions on Programming Languages and Systems*, 1(2):245–257, October 1979. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- Naik:2008:TSE**
- Mayur Naik and Jens Palmberg. A type system equivalent to a model checker. *ACM Transactions on Programming Languages and Systems*, 30(5):29:1–29:24, August 2008. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- Nanda:2006:ISM**
- Mangala Gowri Nanda and S. Ramesh. Interprocedural slicing of multithreaded programs with applications to Java. *ACM Transactions on Programming Languages and Systems*, 28(6):1088–1144, November 2006. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- Nikolic:2013:RAP**
- Durica Nikolić and Fausto Spoto. Reachability analysis of program variables. *ACM Transactions on Programming Languages and Systems*, 35(4):14:1–14:??, December 2013. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).

Nowatzki:2015:SFS

- [NSTD⁺15] Tony Nowatzki, Michael Sartin-Tarm, Lorenzo De Carli, Karthikeyan Sankaralingam, Cristian Estan, and Behnam Robatmili. A scheduling framework for spatial architectures across multiple constraint-solving theories. *ACM Transactions on Programming Languages and Systems*, 37(1):2:1–2:??, January 2015. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).

Nandivada:2013:TFO

- [NSZS13] V. Krishna Nandivada, Jun Shirako, Jisheng Zhao, and Vivek Sarkar. A transformation framework for optimizing task-parallel programs. *ACM Transactions on Programming Languages and Systems*, 35(1):3:1–3:??, April 2013. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).

Olderog:1988:FPP

- [OA88] Ernst-Rüdiger Olderog and Krzysztof R. Apt. Fairness in parallel programs: The transformational approach. *ACM Transactions on Programming Languages and Systems*, 10(3):420–455, July 1988. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/44504.html>.

Odersky:1993:DCD

- [Ode93] Martin Odersky. Defining context-dependent syntax with-

out using contexts. *ACM Transactions on Programming Languages and Systems*, 15(3):535–562, July 1993. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/174159.html>.

Olmedo:2018:CPP

- [OGJ⁺18] Federico Olmedo, Friedrich Gretz, Nils Jansen, Benjamin Lucien Kaminski, Joost-Pieter Katoen, and Annabelle McIver. Conditioning in probabilistic programming. *ACM Transactions on Programming Languages and Systems*, 40(1):4:1–4:??, January 2018. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).

Oh:2014:GSA

- [OHL⁺14] Hakjoo Oh, Kihong Heo, Wonchan Lee, Woosuk Lee, Daejun Park, Jeehoon Kang, and Kwangkeun Yi. Global sparse analysis framework. *ACM Transactions on Programming Languages and Systems*, 36(3):8:1–8:??, September 2014. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).

Ohori:1995:PRC

Atsushi Ohori. A polymorphic record calculus and its compilation. *ACM Transactions on Programming Languages and Systems*, 17(6):844–895, November 1995. CODEN ATPSDT. ISSN 0164-0925

- (print), 1558-4593 (electronic).
 URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/218572.html>.
- [Oho07] Atsushi Ohori. A proof theory for machine code. *ACM Transactions on Programming Languages and Systems*, 29(6):36:1–36:35, October 2007. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [OP04] Martin Odersky and Benjamin C. Pierce. Guest editorial. *ACM Transactions on Programming Languages and Systems*, 26(5):767–768, September 2004. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [OKN06] Takeshi Ogasawara, Hideaki Komatsu, and Toshio Nakatani. EDO: Exception-Directed Optimization in Java. *ACM Transactions on Programming Languages and Systems*, 28(1):70–105, January 2006. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [OL82] Susan Owicki and Leslie Lamport. Proving liveness properties of concurrent programs. *ACM Transactions on Programming Languages and Systems*, 4(3):455–495, July 1982. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [OLH⁺16] Hakjoo Oh, Wonchan Lee, Kihong Heo, Hongseok Yang, and Kwangkeun Yi. Selective X-sensitive analysis guided by impact pre-analysis. *ACM Transactions on Programming Languages and Systems*, 38(2):6:1–6:??, January 2016. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [Opp80] Dereck C. Oppen. Prettyprinting. *ACM Transactions on Programming Languages and Systems*, 2(4):465–483, October 1980. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [Oss83] Marty Ossefort. Correctness proofs of communicating processes: Three illustrative examples from the literature. *ACM Transactions on Programming Languages and Systems*, 5(4):620–640, October 1983. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [OYR09] Peter W. O’Hearn, Hongseok Yang, and John C. Reynolds. Separation and information hiding. *ACM Transactions on Programming Languages and Systems*, 31(3):11:1–11:50, April 2009. CODEN ATPSDT. ISSN

0164-0925 (print), 1558-4593 (electronic).

Pingali:1985:EDD

- [PA85] Keshav Pingali and Arvind. Efficient demand-driven evaluation. part 1. *ACM Transactions on Programming Languages and Systems*, 7(2):311–333, April 1985. CODEN ATPSDT. ISSN 0164-0925 [Pal95] (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/3480.html>.

Pingali:1986:CFI

- [PA86a] Keshav Pingali and Arvind. Clarification of “Feeding inputs on demand” in Efficient demand-driven evaluation. part 1. *ACM Transactions on Programming Languages and Systems*, 8(1):140–141, January 1986. CODEN ATPSDT. ISSN 0164-0925 [Pal98] (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/5003.html>.

Pingali:1986:EDD

- [PA86b] Keshav Pingali and Arvind. Efficient demand-driven evaluation. part 2. *ACM Transactions on Programming Languages and Systems*, 8(1):109–139, January 1986. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).

Padovani:2019:CFS

- [Pad19] Luca Padovani. Context-free session type inference. *ACM*

Transactions on Programming Languages and Systems, 41(2):9:1–9:??, June 2019. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL https://dl.acm.org/ft_gateway.cfm?id=3229062.

Palsberg:1995:CAC

Jens Palsberg. Closure analysis in constraint form. *ACM Transactions on Programming Languages and Systems*, 17(1):47–62, January 1995. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/201001.html>.

Palsberg:1998:EBF

Jens Palsberg. Equality-based flow analysis versus recursive types. *ACM Transactions on Programming Languages and Systems*, 20(6):1251–1264, November 1998. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/toplas/1998-20-6/p1251-palsberg/>.

Palsberg:2011:E

- [Pal11a] Jens Palsberg. Editorial. *ACM Transactions on Programming Languages and Systems*, 33(1):1:1, January 2011. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).

- [Pal11b] **Palsberg:2011:EN** Jens Palsberg. Editorial note. *ACM Transactions on Programming Languages and Systems*, 33(6):18:1, December 2011. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [Pal12] **Palsberg:2012:E** Jens Palsberg. Editorial. *ACM Transactions on Programming Languages and Systems*, 34(1):1:1, April 2012. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [Pal13] **Palsberg:2013:E** Jens Palsberg. Editorial. *ACM Transactions on Programming Languages and Systems*, 35(1):1:1-1:??, April 2013. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [Pal15] **Palsberg:2015:E** Jens Palsberg. Editorial. *ACM Transactions on Programming Languages and Systems*, 37(1):1:1-1:??, January 2015. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [Par90] **Parnas:1990:TCI** David L. Parnas. Technical correspondence: On iterative constructs. *ACM Transactions on Programming Languages and Systems*, 12(1):139-141, January 1990. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [PAS⁺15] **Patrignani:2015:SCP** Marco Patrignani, Pieter Agten, Raoul Strackx, Bart Jacobs, Dave Clarke, and Frank Piessens. Secure compilation to protected module architectures. *ACM Transactions on Programming Languages and Systems*, 37(2):6:1-6:??, April 2015. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [Pau01] **Paulson:2001:MTP** Lawrence C. Paulson. Mechanizing a theory of program composition for UNITY. *ACM Transactions on Programming Languages and Systems*, 23(5):626-656, September 2001. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [PB80] **Papadimitriou:1980:PBH** Christos H. Papadimitriou and Philip A. Bernstein. On the performance of balanced hashing functions when the keys are not equiprobable. *ACM Transactions on Programming Languages and Systems*, 2(1):77-89, January 1980. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [PB97] **Pingali:1997:OCD** Keshav Pingali and Gianfranco Bilardi. Optimal control depen-
- URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/214517.html>; <http://www.acm.org/pubs/toc/Abstracts/0164-0925/77613.html>.

- dence computation and the Roman chariots problem. *ACM Transactions on Programming Languages and Systems*, 19(3):462–491, May 1997. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). [PCJD08]
URL <http://www.acm.org/pubs/citations/journals/toplas/1997-19-3/p462-pingali/>.
- [PBK⁺07] Harel Paz, David F. Bacon, Elliot K. Kolodner, Erez Petrank, and V. T. Rajan. An efficient on-the-fly cycle collection. *ACM Transactions on Programming Languages and Systems*, 29(4):20:1–20:43, August 2007. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). [Paz:2007:EFC]
- [PBR⁺15] Donald E. Porter, Michael D. Bond, Indrajit Roy, Kathryn S. Mckinley, and Emmett Witchel. Practical fine-grained information flow control using Laminar. *ACM Transactions on Programming Languages and Systems*, 37(1):4:1–4:??, January 2015. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). [Porter:2015:PFG]
- [PCC85] Joseph C. H. Park, K. M. Choe, and C. H. Chang. A new analysis of LALR formalisms. *ACM Transactions on Programming Languages and Systems*, 7(1):159–175, January 1985. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). [Park:1985:NAL]
- [Pem83] Steven Pemberton. Technical correspondence: On Tanen-
- (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/2527.html>. [Preda:2008:SBA]
- Mila Dalla Preda, Mihai Christodorescu, Somesh Jha, and Saumya Debray. A semantics-based approach to malware detection. *ACM Transactions on Programming Languages and Systems*, 30(5):25:1–25:54, August 2008. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). [Pan:2008:PFE]
- Zhelong Pan and Rudolf Eigenmann. PEAK — a fast and effective performance tuning system via compiler optimization orchestration. *ACM Transactions on Programming Languages and Systems*, 30(3):17:1–17:43, May 2008. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). [Pan:2008:PFE]
- [Pea21] David J. Pearce. A lightweight formalism for reference lifetimes and borrowing in Rust. *ACM Transactions on Programming Languages and Systems*, 43(1):3:1–3:73, April 2021. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <https://dl.acm.org/doi/10.1145/3443420>. [Pearce:2021:LFR]
- [Pemberton:1983:TCT] Steven Pemberton. Technical correspondence: On Tanen-

- baum, van Staveren, and Stevenson's "Using Peephole Optimization on Intermediate Code". *ACM Transactions on Programming Languages and Systems*, 5(3):499, July 1983. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). See [TvS82, Tan83].
- [Per79] **Perrott:1979:LAV**
R. H. Perrott. A language for array and vector processors. *ACM Transactions on Programming Languages and Systems*, 1(2):177–195, October 1979. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [Per90] **Perry:1990:GEI**
Dewayne E. Perry. Guest Editor's introduction. *ACM Transactions on Programming Languages and Systems*, 12(4):641–642, October 1990. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [Pet82] **Peterson:1982:UAC**
Gary L. Peterson. An $O(n \log n)$ unidirectional algorithm for the circular extrema problem. *ACM Transactions on Programming Languages and Systems*, 4(4):758–762, October 1982. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). Peterson presents a deterministic distributed algorithm for finding the largest of a set of n uniquely numbered processes in a ring. The algorithm requires $O(n \log n)$ messages in the worst case, and is unidirectional. The number of processes is not initially known.
- [Pet83a] **Peterson:1983:CRW**
Gary L. Peterson. Concurrent reading while writing. *ACM Transactions on Programming Languages and Systems*, 5(1):46–55, January 1983. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [Pet83b] **Peterson:1983:NSL**
Gary L. Peterson. A new solution to Lamport's concurrent programming problem using small shared variables. *ACM Transactions on Programming Languages and Systems*, 5(1):56–65, January 1983. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [PF96] **Proebsting:1996:DDR**
Todd A. Proebsting and Charles N. Fischer. Demand-driven register allocation. *ACM Transactions on Programming Languages and Systems*, 18(6):683–710, November 1996. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/toplas/235829.html>; <http://www.acm.org/pubs/toc/Abstracts/toplas/236117.html>.
- [PFH11] **Pratikakis:2011:LPS**
Polyvios Pratikakis, Jeffrey S. Foster, and Michael Hicks. LOCKSMITH: Practical static

- race detection for C. *ACM Transactions on Programming Languages and Systems*, 33(1): 3:1–3:55, January 2011. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). [Pip97]
- Patrignani:2021:RSC**
- [PG21] Marco Patrignani and Deepak Garg. Robustly safe compilation, an efficient form of secure compilation. *ACM Transactions on Programming Languages and Systems*, 43(1): 1:1–1:41, April 2021. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <https://dl.acm.org/doi/10.1145/3436809>. [Piq96]
- Poletto:1999:CTL**
- [PHEK99] Massimiliano Poletto, Wilson C. Hsieh, Dawson R. Engler, and M. Frans Kaashoek. 'C and tcc: a language and compiler for dynamic code generation. *ACM Transactions on Programming Languages and Systems*, 21(2):324–369, March 1999. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/citations/journals/toplas/1999-21-2/p324-poletto/>. [PK80]
- Paek:2002:EPA**
- [PHP02] Yunheung Paek, Jay Hoefflinger, and David Padua. Efficient and precise array access analysis. *ACM Transactions on Programming Languages and Systems*, 24(1):65–109, January 2002. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). [Pippenger:1997:PVI]
- Nicholas Pippenger. Pure versus impure Lisp. *ACM Transactions on Programming Languages and Systems*, 19(2):223–238, March 1997. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/citations/journals/toplas/1997-19-2/p223-pippenger/>.
- Piquer:1996:IDG**
- José M. Piquer. Indirect distributed garbage collection: Handling object migration. *ACM Transactions on Programming Languages and Systems*, 18(5):615–647, September 1996. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/232711.html>; <http://www.acm.org/pubs/toc/Abstracts/toplas/232711.html>; <http://www.acm.org/pubs/toc/Abstracts/toplas/235457.html>.
- Pai:1980:GCR**
- Ajit B. Pai and Richard B. Kieburtz. Global context recovery: a new strategy for syntactic error recovery by table-drive parsers. *ACM Transactions on Programming Languages and Systems*, 2(1):18–41, January 1980. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).

- Paige:1982:FDC**
- [PK82] Robert Paige and Shaye Koenig. Finite differencing of computable expressions. *ACM Transactions on Programming Languages and Systems*, 4(3):402–454, July 1982. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- Pearce:2007:EFS**
- [PKH07] David J. Pearce, Paul H. J. Kelly, and Chris Hankin. Efficient field-sensitive pointer analysis of C. *ACM Transactions on Programming Languages and Systems*, 30(1):4:1–4:42, November 2007. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- Park:2004:ORC**
- [PM04] Jinpyo Park and Soo-Mook Moon. Optimistic register coalescing. *ACM Transactions on Programming Languages and Systems*, 26(4):735–765, July 2004. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- Payet:2006:NIL**
- [PM06] Etienne Payet and Fred Mesnard. Nontermination inference of logic programs. *ACM Transactions on Programming Languages and Systems*, 28(2):256–289, March 2006. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- Pingali:2009:RTP**
- [PM09] Keshav Pingali and Kathryn McKinley. Remembrances of things past. *ACM Transactions on Programming Languages and Systems*, 31(4):17:1–17:2, May 2009. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- Palsberg:1995:TSE**
- [PO95] Jens Palsberg and Patrick O’Keefe. A type system equivalent to flow analysis. *ACM Transactions on Programming Languages and Systems*, 17(4):576–599, July 1995. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/210187.html>.
- Peng:1991:DFA**
- [PP91] Wuxu Peng and S. Purushothaman. Data flow analysis of communicating finite state machines. *ACM Transactions on Programming Languages and Systems*, 13(3):399–442, July 1991. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/117015.html>. See [Pur91].
- Pinter:1994:POP**
- [PP94] Shlomit S. Pinter and Ron Y. Pinter. Program optimization and parallelization using idioms. *ACM Transactions on Programming Languages and Systems*,

- 16(3):305–327, May 1994. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/177494.html>.
- [PPS79] N. S. Prywes, Amir Pnueli, and S. Shastri. Use of a nonprocedural specification language and associated program generator in software development. *ACM Transactions on Programming Languages and Systems*, 1(2):196–217, October 1979. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [PPT08] Sungwoo Park, Frank Pfenning, and Sebastian Thrun. A probabilistic language based on sampling functions. *ACM Transactions on Programming Languages and Systems*, 31(1):4:1–4:46, December 2008. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [PR07] Andreas Podelski and Andrey Rybalchenko. Transition predicate abstraction and fair termination. *ACM Transactions on Programming Languages and Systems*, 29(3):15:1–15:31, May 2007. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [Pro95] Todd A. Proebsting. BURS automata generation. *ACM Transactions on Programming Languages and Systems*, 17(3):461–486, May 1995. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/203098.html>.
- [PS92] Lori L. Pollock and Mary Lou Soffa. Incremental global reoptimization of programs. *ACM Transactions on Programming Languages and Systems*, 14(2):173–200, April 1992. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/128865.html>.
- [PS93] Krishna V. Palem and Barbara B. Simons. Scheduling time-critical instructions on RISC machines. *ACM Transactions on Programming Languages and Systems*, 15(4):632–658, September 1993. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/155190.html>.
- [PS96] Jens Palsberg and Scott Smith. Constrained types and their expressiveness. *ACM Transactions on Programming Languages and Systems*, 18(5):519–527, September 1996. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).

Prywes:1979:UNS**Pollock:1992:IGR****Park:2008:PLB****Palem:1993:STC****Podelski:2007:TPA****Palsberg:1996:CTT****Proebsting:1995:BAG**

- (print), 1558-4593 (electronic).
 URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/232715.html>; <http://www.acm.org/pubs/toc/Abstracts/toplas/232715.html>; <http://www.acm.org/pubs/toc/Abstracts/toplas/235454.html>. [PS05]
- Poletto:1999:LSR**
- [PS99] Massimiliano Poletto and Vivek Sarkar. Linear scan register allocation. *ACM Transactions on Programming Languages and Systems*, 21(5):895–913, September 1999. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). [PT00]
 URL <http://www.acm.org/pubs/articles/journals/toplas/1999-21-5/p895-poletto/p895-poletto.pdf>; <http://www.acm.org/pubs/citations/journals/toplas/1999-21-5/p895-poletto/>.
- Pottier:2003:IFI**
- [PS03] François Pottier and Vincent Simonet. Information flow inference for ML. *ACM Transactions on Programming Languages and Systems*, 25(1):117–158, January 2003. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). [Pur91]
- Pearlmutter:2008:RMA**
- [PS08] Barak A. Pearlmutter and Jeffrey Mark Siskind. Reverse-mode AD in a functional framework: Lambda the ultimate backpropagator. *ACM Transactions on Programming Languages and Systems*, 30(2):7:1–7:36, March 2008. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). [Pottier:2005:SAS]
- Pottier:2005:SAS**
- François Pottier, Christian Skalka, and Scott Smith. A systematic approach to static access control. *ACM Transactions on Programming Languages and Systems*, 27(2):344–382, March 2005. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- Pierce:2000:LTI**
- Pierce:2000:LTI**
- Benjamin C. Pierce and David N. Turner. Local type inference. *ACM Transactions on Programming Languages and Systems*, 22(1):1–44, January 2000. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/citations/journals/toplas/2000-22-1/p1-pierce/>.
- Purushothaman:1991:CDF**
- Purushothaman:1991:CDF**
- S. Purushothaman. Corrigendum: “Data Flow Analysis of Communicating Finite State Machines”. *ACM Transactions on Programming Languages and Systems*, 13(4):633, October 1991. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). See [PP91].
- Purtilo:1994:PSB**
- Purtilo:1994:PSB**
- James M. Purtilo. The POLYLITH software bus. *ACM Transactions on Programming Languages and Systems*, 15(2):177–200, February 1994. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).

- Languages and Systems*, 16(1): 151–174, January 1994. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/174629.html>. [PZ22]
- [PW94] William Pugh and David Wonnacott. Static analysis of upper and lower bounds on dependences and parallelism. *ACM Transactions on Programming Languages and Systems*, 16(4): 1248–1278, July 1994. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/183525.html>. [PZJ05]
- [PW98] William Pugh and David Wonnacott. Constraint-based array dependence analysis. *ACM Transactions on Programming Languages and Systems*, 20(3): 635–678, May 1998. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/toplas/1998-20-3/p635-pugh/>. [QG95]
- [PXL95] Jens Palsberg, Cun Xiao, and Karl Lieberherr. Efficient implementation of adaptive software. *ACM Transactions on Programming Languages and Systems*, 17(2):264–292, March 1995. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/201066.html>. [Palsberg:2022:SSL]
- [Palsberg:2022:SSL] Jens Pagel and Florian Zuleger. Strong-separation logic. *ACM Transactions on Programming Languages and Systems*, 44(3): 16:1–16:40, September 2022. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <https://dl.acm.org/doi/10.1145/3498847>. [Palsberg:2005:ADC]
- [Palsberg:2005:ADC] Jens Palsberg, Tian Zhao, and Trevor Jim. Automatic discovery of covariant read-only fields. *ACM Transactions on Programming Languages and Systems*, 27(1):126–162, January 2005. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). [Qian:1995:CRO]
- [Qian:1995:CRO] Xiaolei Qian and Allen Goldberg. Corrigendum: “Referential Opacity in Nondeterministic Data Refinement”. *ACM Transactions on Programming Languages and Systems*, 17(1): 180, January 1995. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). See *ACM Lett. Program. Lang. Syst.* 2, 1–4 (Mar.–Dec. 1993), 233–241. [Qian:2000:SFI]
- [Qian:2000:SFI] Zhenyu Qian. Standard fix-point iteration for Java byte-

- code verification. *ACM Transactions on Programming Languages and Systems*, 22(4): 638–672, 2000. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/citations/journals/toplas/2000-22-4/p638-qian/>.
- [QL91] Russell W. Quong and Mark A. Linton. Linking programs incrementally. *ACM Transactions on Programming Languages and Systems*, 13(1):1–20, January 1991. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/102804.html>.
- [QR00] Fabien Quilleré and Sanjay Rajopadhye. Optimizing memory usage in the polyhedral model. *ACM Transactions on Programming Languages and Systems*, 22(5):773–815, 2000. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/articles/journals/toplas/2000-22-5/p773-quillere/p773-quillere.pdf>; <http://www.acm.org/pubs/citations/journals/toplas/2000-22-5/p773-quillere/>.
- [RAB⁺07] Venkatesh Prasad Ranganath, Torben Amtoft, Anindya Banerjee, John Hatcliff, and Matthew B. Dwyer. A new foundation for control dependence and slicing for modern program structures. *ACM Transactions on Programming Languages and Systems*, 29(5):27:1–27:43, August 2007. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [Ram94] G. Ramalingam. The undecidability of aliasing. *ACM Transactions on Programming Languages and Systems*, 16(5):1467–1471, September 1994. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/186041.html>.
- [Ram99] G. Ramalingam. Identifying loops in almost linear time. *ACM Transactions on Programming Languages and Systems*, 21(2):175–188, March 1999. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/citations/journals/toplas/1999-21-2/p175-ramalingam/>.
- [Ram00] G. Ramalingam. Context-sensitive synchronization-sensitive analysis is undecidable. *ACM Transactions on Programming Languages and Systems*, 22(2): 416–430, March 2000. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).

- URL <http://www.acm.org/pubs/citations/journals/toplas/2000-22-2/p416-ramalingam/>.
- Rao:1994:RAP**
- [Rao94] Josyula R. Rao. Reasoning about probabilistic parallel programs. *ACM Transactions on Programming Languages and Systems*, 16(3):798–842, May 1994. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/177724.html>. [RCS93]
- Reiter:1994:HSR**
- [RB94] Michael K. Reiter and Kenneth P. Birman. How to securely replicate services. *ACM Transactions on Programming Languages and Systems*, 16(3):986–1009, May 1994. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/177745.html>. [RD87]
- Ramsey:2003:TAB**
- [RC03] Norman Ramsey and Cristina Cifuentes. A transformational approach to binary translation of delayed branches. *ACM Transactions on Programming Languages and Systems*, 25(2):210–224, March 2003. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- Rogers:1995:SDD** [RD97]
- [RCRH95] Anne Rogers, Martin C. Carlisle, John H. Reppy, and L. J. Hendren. Supporting dynamic data structures on distributed-memory machines. *ACM Transactions on Programming Languages and Systems*, 17(2):233–263, March 1995. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/201065.html>.
- Richardson:1993:DPL**
- Joel E. Richardson, Michael J. Carey, and Daniel T. Schuh. The design of the E programming language. *ACM Transactions on Programming Languages and Systems*, 15(3):494–534, July 1993. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/174157.html>.
- Reps:1987:SSE**
- Thomas Reps and Alan Demers. Sublinear-space evaluation algorithms for attribute grammars. *ACM Transactions on Programming Languages and Systems*, 9(3):408–440, July 1987. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/214529.html>.
- Rinard:1997:CAN**
- Martin C. Rinard and Pedro C. Diniz. Commutativity analysis: a new analysis technique for parallelizing compilers. *ACM*

- Transactions on Programming Languages and Systems*, 19(6): 942–991, November 1997. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/toplas/1997-19-6/p942-rinard/>.
- Rinard:2003:ESB**
- [RD03] Martin C. Rinard and Pedro C. Diniz. Eliminating synchronization bottlenecks using adaptive replication. *ACM Transactions on Programming Languages and Systems*, 25(3):316–359, May 2003. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- Rossberg:2013:MMM**
- [RD13] Andreas Rossberg and Derek Dreyer. Mixin’ up the ML module system. *ACM Transactions on Programming Languages and Systems*, 35(1):2:1–2:??, April 2013. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- Rong:2008:RAS**
- [RDG08] Hongbo Rong, Alban Douillet, and Guang R. Gao. Register allocation for software pipelined multidimensional loops. *ACM Transactions on Programming Languages and Systems*, 30(4): 23:1–23:68, July 2008. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- Reiss:1983:GCS**
- [Rei83] Steven P. Reiss. Generation of compiler symbol processing mechanisms from specifications. *ACM Transactions on Programming Languages and Systems*, 5(2):127–163, April 1983. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- Rem:1981:APN**
- [Rem81] Martin Rem. Associons: a program notation with tuples instead of variables. *ACM Transactions on Programming Languages and Systems*, 3(3): 251–262, July 1981. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- Reps:1986:GEI**
- [Rep86] Thomas Reps. Guest Editor’s introduction. *ACM Transactions on Programming Languages and Systems*, 8(4):417–418, October 1986. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- Reps:1998:MMT**
- [Rep98] Thomas Reps. “maximal-munch” tokenization in linear time. *ACM Transactions on Programming Languages and Systems*, 20(2):259–273, March 1998. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/toplas/1998-20-2/p259-reps/>.

- [Rep00] **Reps:2000:UCS** Thomas Reps. Undecidability of context-sensitive data-independence analysis. *ACM Transactions on Programming Languages and Systems*, 22(1):162–186, January 2000. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/citations/journals/toplas/2000-22-1/p162-reps/>.
- [Rhi03] **Rhiger:2003:FEL** Morten Rhiger. A foundation for embedded languages. *ACM Transactions on Programming Languages and Systems*, 25(3):291–315, May 2003. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [RF97] **Ramsey:1997:SRM** Norman Ramsey and Mary F. Fernández. Specifying representations of machine instructions. *ACM Transactions on Programming Languages and Systems*, 19(3):492–524, May 1997. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/citations/journals/toplas/1997-19-3/p492-ramsey/>. This article was written using the noweb literate programming system.
- [RH87] **Rosenkrantz:1987:EAA** D. J. Rosenkrantz and H. B. Hunt. Efficient algorithms for automatic construction and compactification of parsing grammars. *ACM Transactions on Programming Languages and Systems*, 9(4):543–566, October 1987. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/29876.html>.
- [RKRR04] **Roychoudhury:2004:UFT** Abhik Roychoudhury, K. Narayan Kumar, C. R. Ramakrishnan, and I. V. Ramakrishnan. An unfold/fold transformation framework for definite logic programs. *ACM Transactions on Programming Languages and Systems*, 26(3):464–509, May 2004. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [RKSR12] **Reenganarayanan:2012:PLT** Lakshminarayanan Reenganarayanan, Daegon Kim, Michelle Mills Strout, and Sanjay Rajopadhye. Parameterized loop tiling. *ACM Transactions on Programming Languages and Systems*, 34(1):3:1–3:41, April 2012. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [R185] **Richter:1985:NSE** Helmut Richter. Noncorrecting syntax error recovery. *ACM Transactions on Programming Languages and Systems*, 7(3):478–489, July 1985. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/4019.html>.

- [RL98] **Rinard:1998:DIE**
 Martin C. Rinard and Monica S. Lam. The design, implementation, and evaluation of Jade. *ACM Transactions on Programming Languages and Systems*, 20(3):483–545, May 1998. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/toplas/1998-20-3/p483-rinard/>.
- [RLS⁺01] **Ryder:2001:SIM**
 Barbara G. Ryder, William A. Landi, Philip A. Stocks, Sean Zhang, and Rita Altucher. A schema for interprocedural modification side-effect analysis with pointer aliasing. *ACM Transactions on Programming Languages and Systems*, 23(2):105–186, March 2001. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/citations/journals/toplas/2001-23-1/p105-ryder/>.
- [RM07] **Rival:2007:TPA**
 Xavier Rival and Laurent Mauborgne. The trace partitioning abstract domain. *ACM Transactions on Programming Languages and Systems*, 29(5):26:1–26:51, August 2007. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [RM10] **Ruggieri:2010:TLC**
 Salvatore Ruggieri and Fred Mesnard. Typing linear constraints. *ACM Transactions on Programming Languages and Systems*, 32(6):21:1–21:42, August 2010. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [RMH06] **Rosenkrantz:2006:MMA**
 Daniel J. Rosenkrantz, Lenore R. Mullin, and Harry B. Hunt III. On minimizing materializations of array-valued temporaries. *ACM Transactions on Programming Languages and Systems*, 28(6):1145–1177, November 2006. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [Rob79] **Robertson:1979:CGS**
 Edward L. Robertson. Code generation and storage allocation for machines with span-dependent instructions. *ACM Transactions on Programming Languages and Systems*, 1(1):71–83, July 1979. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [RP88] **Ryder:1988:IDF**
 Barbara G. Ryder and Marvin C. Paull. Incremental data-flow analysis algorithms. *ACM Transactions on Programming Languages and Systems*, 10(1):1–50, January 1988. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/42193.html>.

- [RR03] **Rugina:2003:PAS**
Radu Rugina and Martin C. Rinard. Pointer analysis for structured parallel programs. *ACM Transactions on Programming Languages and Systems*, 25(1):70–116, January 2003. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [RR05] **Rugina:2005:SBA**
Radu Rugina and Martin C. Rinard. Symbolic bounds analysis of pointers, array indices, and accessed memory regions. *ACM Transactions on Programming Languages and Systems*, 27(2):185–235, March 2005. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [RRB19] **Rosa:2019:AOT**
Andrea Rosà, Eduardo Rosales, and Walter Binder. Analysis and optimization of task granularity on the Java Virtual Machine. *ACM Transactions on Programming Languages and Systems*, 41(3):19:1–19:??, July 2019. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL https://dl.acm.org/ft_gateway.cfm?id=3338497.
- [RRSY08] **Rinetzky:2008:CPF**
N. Rinetzky, G. Ramalingam, M. Sagiv, and E. Yahav. On the complexity of partially-flow-sensitive alias analysis. *ACM Transactions on Programming Languages and Systems*, 30(3):13:1–13:28, May 2008. CO-
- [RS84a] **Ramanath:1984:JML**
M. V. S. Ramanath and Marvin Solomon. Jump minimization in linear time. *ACM Transactions on Programming Languages and Systems*, 6(4):527–545, October 1984. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [RS84b] **Reif:1984:RTS**
John H. Reif and Paul G. Spirakis. Real-time synchronization of interprocess communications. *ACM Transactions on Programming Languages and Systems*, 6(2):215–238, April 1984. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). They present probabilistic distributed algorithms for the guard-scheduling problem (Section ??) that guarantee real-time response. A preliminary version of this paper appeared as “Distributed Algorithms for Synchronizing Interprocess Communication in Real Time,” in *Proc. 13th Ann. ACM Symp. on Theory of Computing*, 1981.
- [RS97] **Raja:1997:CFC**
N. Raja and R. K. Shyamasundar. Combinatory formulations of concurrent languages. *ACM Transactions on Programming Languages and Systems*, 19(6):899–915, November 1997. CODEN ATPSDT. ISSN 0164-

- 0925 (print), 1558-4593 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/toplas/1997-19-6/p899-raja/>. [RTP17]
- Reps:2010:FDL**
- [RSL10] Thomas Reps, Mooly Sagiv, and Alexey Loginov. Finite differencing of logical formulas for static analysis. *ACM Transactions on Programming Languages and Systems*, 32(6):24:1–24:55, August 2010. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- Reps:2017:NPA**
- Thomas Reps, Emma Turet-sky, and Prathmesh Prabhu. Newtonian program analysis via tensor product. *ACM Transactions on Programming Languages and Systems*, 39(2):9:1–9:??, May 2017. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- Reed:1988:SVL**
- [RY88] Joylyn Reed and Raymond T. Yeh. Specification and verification of liveness properties of cyclic, concurrent processes. *ACM Transactions on Programming Languages and Systems*, 10(1):156–177, January 1988. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/42195.html>.
- Runge:2023:IES**
- [RSPS23] Tobias Runge, Marco Servetto, Alex Potanin, and Ina Schaefer. Immutability and encapsulation for sound OO information flow control. *ACM Transactions on Programming Languages and Systems*, 45(1):3:1–3:??, March 2023. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <https://dl.acm.org/doi/10.1145/3573270>.
- Ryu:2016:TOO**
- [Ryu16] Sukyoung Ryu. ThisType for object-oriented languages: From theory to practice. *ACM Transactions on Programming Languages and Systems*, 38(3):8:1–8:??, May 2016. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- Reps:1983:ICD**
- [RTD83] Thomas Reps, Tim Teitelbaum, and Alan Demers. Incremental context-dependent analysis for language-based editors. *ACM Transactions on Programming Languages and Systems*, 5(3):449–477, July 1983. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- Stata:1999:TSJ**
- [SA99] Raymie Stata and Martin Abadi. A type system for Java bytecode subroutines. *ACM Transactions on Programming Languages and Systems*, 21(1):90–137, January 1999. CODEN ATPSDT. ISSN 0164-0925

- (print), 1558-4593 (electronic).
 URL <http://www.acm.org/pubs/citations/journals/toplas/>1999-21-1/p90-stata/.
- Shao:2000:ESS**
- [SA00] Zhong Shao and Andrew W. Appel. Efficient and safe-for-space closure conversion. *ACM Transactions on Programming Languages and Systems*, 22(1):129–161, January 2000. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/citations/journals/toplas/>2000-22-1/p129-shao/.
- Sager:1986:SPC**
- [Sag86] Thomas J. Sager. A short proof of a conjecture of DeRemer and Pennello. *ACM Transactions on Programming Languages and Systems*, 8(2):264–271, April 1986. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/>30850.html.
- Sagiv:2007:ISE**
- [Sag07] Mooly Sagiv. Introduction to special ESOP’05 issue. *ACM Transactions on Programming Languages and Systems*, 29(5):23:1–23:2, August 2007. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- Samet:1980:CAP**
- [Sam80] Hanan Samet. A coroutine approach to parsing. *ACM Transactions on Programming Languages and Systems*, 2(3):290–306, July 1980. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- Sands:1996:TCL**
- [San96] David Sands. Total correctness by local improvement in the transformation of functional programs. *ACM Transactions on Programming Languages and Systems*, 18(2):175–234, March 1996. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/>227716.html.
- Sangiorgi:2009:OBC**
- [San09] Davide Sangiorgi. On the origins of bisimulation and coinduction. *ACM Transactions on Programming Languages and Systems*, 31(4):15:1–15:41, May 2009. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- Solovyev:2019:REF**
- [SBB⁺19] Alexey Solovyev, Marek S. Baranowski, Ian Briggs, Charles Jacobsen, Zvonimir Rakamarić, and Ganesh Gopalakrishnan. Rigorous estimation of floating-point round-off errors with symbolic Taylor expansions. *ACM Transactions on Programming Languages and Systems*, 41(1):2:1–2:??, March 2019. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL https://dl.acm.org/ft_gateway.cfm?id=3230733.

- Spoto:2019:SII**
- [SBE⁺19] Fausto Spoto, Elisa Burato, Michael D. Ernst, Pietro Ferrara, Alberto Lovato, Damiano Macedonio, and Ciprian Spiridon. Static identification of injection attacks in Java. *ACM Transactions on Programming Languages and Systems*, 41(3):18:1–18:??, July 2019. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL https://dl.acm.org/ft_gateway.cfm?id=3332371.
- Shi:2022:TCP**
- [SBS22] Kensen Shi, David Bieber, and Rishabh Singh. TF-Coder: Program synthesis for tensor manipulations. *ACM Transactions on Programming Languages and Systems*, 44(2):10:1–10:36, June 2022. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <https://dl.acm.org/doi/10.1145/3517034>.
- Schwartz:1980:U**
- [Sch80] Jacob T. Schwartz. Ultra-computers. *ACM Transactions on Programming Languages and Systems*, 2(4):484–521, October 1980. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- Schneider:1982:SDP**
- [Sch82] Fred B. Schneider. Synchronization in distributed programs. *ACM Transactions on Programming Languages and Systems*, 4(2):125–148, April 1982. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- Schmidt:1985:DGV**
- [Sch85] David A. Schmidt. Detecting global variables in denotational specifications. *ACM Transactions on Programming Languages and Systems*, 7(2):299–310, April 1985. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/3323.html>.
- Skorstengaard:2020:RAM**
- [SDB20] Lau Skorstengaard, Dominique Devriese, and Lars Birkedal. Reasoning about a machine with local capabilities: Provably safe stack and return pointer management. *ACM Transactions on Programming Languages and Systems*, 42(1):1–53, January 2020. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <https://dl.acm.org/doi/abs/10.1145/3363519>.
- Swalens:2021:CCC**
- [SDD21] Janwillem Swalens, Joeri De Koster, and Wolfgang De Meuter. Chocola: Composable concurrency language. *ACM Transactions on Programming Languages and Systems*, 42(4):17:1–17:56, February 2021. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <https://dl.acm.org/doi/10.1145/3427201>.

Sampaio:2013:DA

- [SdSCP13] Diogo Sampaio, Rafael Martins de Souza, Sylvain Collange, and Fernando Magno Quintão Pereira. Divergence analysis. *ACM Transactions on Programming Languages and Systems*, 35(4):13:1–13:??, December 2013. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).

Strickland:2013:CFC

- [SDTF13] T. Stephen Strickland, Christos Dimoulas, Asumu Takikawa, and Matthias Felleisen. Contracts for first-class classes. *ACM Transactions on Programming Languages and Systems*, 35(3):11:1–11:58, November 2013. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).

Sethi:1983:CFA

- [Set83] Ravi Sethi. Control flow aspects of semantics-directed compiling. *ACM Transactions on Programming Languages and Systems*, 5(4):554–595, October 1983. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).

Stamos:1990:RE

- [SG90] James W. Stamos and David K. Gifford. Remote evaluation. *ACM Transactions on Programming Languages and Systems*, 12(4):537–565, October 1990. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/>

<pubs/toc/Abstracts/0164-0925/88631.html>.

Sistla:2004:SRS

- [SG04] A. Prasad Sistla and Patrice Godefroid. Symmetry and reduced symmetry in model checking. *ACM Transactions on Programming Languages and Systems*, 26(4):702–734, July 2004. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).

Sreedhar:1996:ILU

- [SGL96] Vugranam C. Sreedhar, Guang R. Gao, and Yong-Fong Lee. Identifying loops using DJ graphs. *ACM Transactions on Programming Languages and Systems*, 18(6):649–658, November 1996. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/toplas/235827.html>; <http://www.acm.org/pubs/toc/Abstracts/toplas/236115.html>.

Sreedhar:1997:ICD

- [SGL97] Vugranam C. Sreedhar, Guang R. Gao, and Yong-Fong Lee. Incremental computation of dominator trees. *ACM Transactions on Programming Languages and Systems*, 19(2):239–252, March 1997. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/citations/journals/toplas/1997-19-2/p239-sreedhar/>.

- [SGL98] **Sreedhar:1998:NFE**
 Vugranam C. Sreedhar, Guang R. Gao, and Yong-Fong Lee. A new framework for elimination-based data flow analysis using DJ graphs. *ACM Transactions on Programming Languages and Systems*, 20(2):388–435, March 1998. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/toplas/1998-20-2/p388-sreedhar/>.
- [SH89] **Steenkiste:1989:SIR**
 Peter A. Steenkiste and John L. Hennessy. A simple interprocedural register allocation algorithm and its effectiveness for Lisp. *ACM Transactions on Programming Languages and Systems*, 11(1):1–32, January 1989. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/59289.html>.
- [Sha82] **Sharir:1982:SOC**
 Micha Sharir. Some observations concerning formal differentiation of set theoretic expressions. *ACM Transactions on Programming Languages and Systems*, 4(2):196–225, April 1982. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [SHB⁺07] **Stoyle:2007:MMS**
 Gareth Stoyle, Michael Hicks, Gavin Bierman, Peter Sewell, and Iulian Neamtiu. *Mutatis Mutandis*: Safe and predictable dynamic software updating. *ACM Transactions on Programming Languages and Systems*, 29(4):22:1–22:70, August 2007. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [She91] **Sheard:1991:AGU**
 Tim Sheard. Automatic generation and use of abstract structure operators. *ACM Transactions on Programming Languages and Systems*, 13(4):531–557, October 1991. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/115369.html>.
- [SIG17] **Sekiyama:2017:PMC**
 Taro Sekiyama, Atsushi Igarashi, and Michael Greenberg. Polymorphic manifest contracts, revised and resolved. *ACM Transactions on Programming Languages and Systems*, 39(1):3:1–3:??, March 2017. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [Sij89] **Sijtsma:1989:PRL**
 Ben A. Sijtsma. On the Productivity of Recursive List Definitions. *ACM Transactions on Programming Languages and Systems*, 11(4):633–649, October 1989. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).

- URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/69563.html>. [SJP12]
- [Sip82] Paolo Sipala. Compact storage of binary trees. *ACM Transactions on Programming Languages and Systems*, 4(3):345–361, July 1982. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). [Sipala:1982:CSB]
- [Sit79] Richard L. Sites. The compilation of loop induction expressions. *ACM Transactions on Programming Languages and Systems*, 1(1):50–57, July 1979. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). [Sites:1979:CLI] [SK88]
- [SJ03] Fausto Spoto and Thomas Jensen. Class analyses as abstract interpretations of trace semantics. *ACM Transactions on Programming Languages and Systems*, 25(5):578–630, September 2003. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). [Spoto:2003:CAA]
- [SJ06] Elizabeth Scott and Adrian Johnstone. Right nulled GLR parsers. *ACM Transactions on Programming Languages and Systems*, 28(4):577–618, July 2006. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). [Scott:2006:RNG] [Sku95]
- [Smans:2012:IDF] Jan Smans, Bart Jacobs, and Frank Piessens. Implicit dynamic frames. *ACM Transactions on Programming Languages and Systems*, 34(1):2:1–2:58, April 2012. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [Schwanke:1988:SR] Robert W. Schwanke and Gail E. Kaiser. Smarter recompilation. *ACM Transactions on Programming Languages and Systems*, 10(4):627–632, October 1988. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/214505.html>. See remarks [Tic88].
- [Sangiorgi:2011:EBH] Davide Sangiorgi, Naoki Kobayashi, and Eijiro Sumii. Environmental bisimulations for higher-order languages. *ACM Transactions on Programming Languages and Systems*, 33(1):5:1–5:69, January 2011. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [Skudlarek:1995:NMI] Joseph P. Skudlarek. Notes on “A Methodology for Implementing Highly Concurrent Data Objects”. *ACM Transactions on Programming Languages and Systems*, 17(1):45–46, January 1995. CODEN

- ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/200999.html>. [SM81]
- Shankar:1992:SRH**
- [SL92] A. Udaya Shankar and Simon S. Lam. A stepwise refinement heuristic for protocol construction. *ACM Transactions on Programming Languages and Systems*, 14(3):417–461, July 1992. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/129394.html>. [SM82]
- Schultz:2003:APS**
- [SLC03] Ulrik P. Schultz, Julia L. Lawall, and Charles Consel. Automatic program specialization for Java. *ACM Transactions on Programming Languages and Systems*, 25(4):452–499, July 2003. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). [SM89]
- Sloane:1995:EAG**
- [Slo95] Anthony M. Sloane. An evaluation of an automatically generated compiler. *ACM Transactions on Programming Languages and Systems*, 17(5):691–703, September 1995. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/213980.html>. [SMP10]
- Steensgaard-Madsen:1981:SOA**
- J. Steensgaard-Madsen. A statement-oriented approach to data abstraction. *ACM Transactions on Programming Languages and Systems*, 3(1):1–10, January 1981. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). See remarks [Ell82, SM82].
- Steensgaard-Madsen:1982:TCS**
- J. Steensgaard-Madsen. Technical correspondence: Steensgaard-Madsen’s reply. *ACM Transactions on Programming Languages and Systems*, 4(1):122–123, January 1982. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). See [SM81, Ell82].
- Steensgaard-Madsen:1989:TRO**
- J. Steensgaard-Madsen. Type representation of objects by functions. *ACM Transactions on Programming Languages and Systems*, 11(1):67–89, January 1989. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/77345.html>.
- Spoto:2010:TAJ**
- Fausto Spoto, Fred Mesnard, and Étienne Payet. A termination analyzer for Java byte-code based on path-length. *ACM Transactions on Programming Languages and Systems*, 32(3):

- 8:1–8:70, March 2010. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). [Son87]
- [SNS⁺14] Sven Stork, Karl Naden, Joshua Sunshine, Manuel Mohr, Alcides Fonseca, Paulo Marques, and Jonathan Aldrich. *Æminium: a permission-based concurrent-by-default programming language approach*. *ACM Transactions on Programming Languages and Systems*, 36(1):2:1–2:??, March 2014. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). [Sor89]
- [Sok87] Stefan Sokolowski. Soundness of Hoare’s logic: An automated proof using LCF. *ACM Transactions on Programming Languages and Systems*, 9(1):100–120, January 1987. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/11326.html>. [Sou84]
- [Sol92] Jon A. Solworth. Epochs. *ACM Transactions on Programming Languages and Systems*, 14(1):28–53, January 1992. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/116785.html>. [SP97]
- [Sonnenschein:1987:GTS] Michael Sonnenschein. Graph translation schemes to generate compiler parts. *ACM Transactions on Programming Languages and Systems*, 9(4):473–490, October 1987. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/29874.html>.
- [Sorkin:1989:TCS] Arthur Sorkin. Technical correspondence: Some comments on “A Solution to a Problem with Morel and Renvoise’s “Global Optimization by Suppression of Partial Redundancies””. *ACM Transactions on Programming Languages and Systems*, 11(4):666–668, October 1989. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/214513.html>. See [DS88].
- [Soundararajan:1984:ASC] N. Soundararajan. Axiomatic semantics of communicating sequential processes. *ACM Transactions on Programming Languages and Systems*, 6(4):647–662, October 1984. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [Sansom:1997:FBP] Patrick M. Sansom and Simon L. Peyton Jones. Formally based

- profiling for higher-order functional languages. *ACM Transactions on Programming Languages and Systems*, 19(2):334–385, March 1997. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/citations/journals/toplas/1997-19-2/p334-sansom/>. [SR21]
- [SP07] Vincent Simonet and François Pottier. A constraint-based approach to guarded algebraic data types. *ACM Transactions on Programming Languages and Systems*, 29(1):1:1–1:56, January 2007. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). [Simonet:2007:CBA]
- [Spo86] C. R. Spooner. The ML approach to the readable all-purpose language. *ACM Transactions on Programming Languages and Systems*, 8(2):215–243, April 1986. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). [Spooner:1986:MAR]
- [SRW98] Mooly Sagiv, Thomas Reps, and Reinhard Wilhelm. Solving shape-analysis problems in languages with destructive updating. *ACM Transactions on Programming Languages and Systems*, 20(1):1–50, January 1998. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/toplas/1998-20-1/p1-sagiv/>. [Sagiv:1998:SSA]
- [SRM10] Vivy Suhendra, Abhik Roychoudhury, and Tulika Mitra. Scratchpad allocation for concurrent embedded software. *ACM Transactions on Programming Languages and Systems*, 32(4):13:1–13:47, April 2010. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). [Suhendra:2010:SAC]
- [SR95] R. Sekar and I. V. Ramakrishnan. Fast strictness analysis based on demand propagation. *ACM Transactions on Programming Languages and Systems*, 17(6):896–937, November 1995. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/218573.html>. [Shen:2021:ALI]
- Jiasi Shen and Martin C. Rinard. Active learning for inference and regeneration of applications that access databases. *ACM Transactions on Programming Languages and Systems*, 42(4):18:1–18:119, February 2021. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <https://dl.acm.org/doi/10.1145/3430952>.

Sagiv:2002:PSA

- [SRW02] Mooly Sagiv, Thomas Reps, and Reinhard Wilhelm. Parametric shape analysis via 3-valued logic. *ACM Transactions on Programming Languages and Systems*, 24(3):217–298, May 2002. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).

Soisalon-Soininen:1982:IEE

- [SS82] Eljas Soisalon-Soininen. Inessential error entries and their use in LR parser optimization. *ACM Transactions on Programming Languages and Systems*, 4(2):179–195, April 1982. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). See [LaL84].

Schlichting:1984:UMP

- [SS84] Richard D. Schlichting and Fred B. Schneider. Using message passing for distributed programming: Proof rules and disciplines. *ACM Transactions on Programming Languages and Systems*, 6(3):402–431, July 1984. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).

Shasha:1988:ECE

- [SS88] Dennis Shasha and Marc Snir. Efficient and correct execution of parallel programs that share memory. *ACM Transactions on Programming Languages and Systems*, 10(2):282–312, April 1988. CODEN ATPSDT. ISSN 0164-0925

(print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/42277.html>.

Skeppstedt:1996:UDA

- [SS96] Jonas Skeppstedt and Per Stenström. Using dataflow analysis techniques to reduce ownership overhead in cache coherence protocols. *ACM Transactions on Programming Languages and Systems*, 18(6):659–682, November 1996. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/toplas/235828.html>; <http://www.acm.org/pubs/toc/Abstracts/toplas/236116.html>.

Sagonas:1998:AMT

- [SS98] Konstantinos Sagonas and Terrence Swift. An abstract machine for tabled execution of fixed-order stratified logic programs. *ACM Transactions on Programming Languages and Systems*, 20(3):586–634, May 1998. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/toplas/1998-20-3/p586-sagonas/>.

Schulte:2005:WDB

- [SS05a] Christian Schulte and Peter J. Stuckey. When do bounds and domain propagation lead to the same search space? *ACM Transactions on Programming*

- Languages and Systems*, 27(3): 388–425, May 2005. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [SS05b] Peter J. Stuckey and Martin Sulzmann. A theory of overloading. *ACM Transactions on Programming Languages and Systems*, 27(6):1216–1269, November 2005. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [SS08] Christian Schulte and Peter J. Stuckey. Efficient constraint propagation engines. *ACM Transactions on Programming Languages and Systems*, 31(1):2:1–2:43, December 2008. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). See erratum [SS09].
- [SS09] Christian Schulte and Peter J. Stuckey. Erratum to: Efficient constraint propagation engines. *ACM Transactions on Programming Languages and Systems*, 31(2):1, February 2009. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). See [SS08].
- [SS13] Stefan Staiger-Stöhr. Practical integrated analysis of pointers, dataflow and control flow. *ACM Transactions on Programming Languages and Systems*, 35(1):5:1–5:??, April 2013. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [SSD09] Jon Sneyers, Tom Schrijvers, and Bart Demoen. The computational power and complexity of constraint handling rules. *ACM Transactions on Programming Languages and Systems*, 31(2):8:1–8:42, February 2009. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [SSS81] Edmond Schonberg, Jacob T. Schwartz, and Micha Sharir. An automatic technique for selection of data structures in SETL programs. *ACM Transactions on Programming Languages and Systems*, 3(2):126–143, April 1981. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [SSS83] Seppo Sippu and Eljas Soisalon-Soininen. A syntax-error-handling technique and its experimental analysis. *ACM Transactions on Programming Languages and Systems*, 5(4):656–679, October 1983. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [ST00a] Gregor Snelting and Frank Tip. Understanding class hierarchies using concept anal-

- ysis. *ACM Transactions on Programming Languages and Systems*, 22(3):540–582, 2000. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/articles/journals/toplas/2000-22-3/p540-snelting/p540-snelting.pdf>; <http://www.acm.org/pubs/citations/journals/toplas/2000-22-3/p540-snelting/>. [Sto04]
- [ST00b] Michael Sperber and Peter Thiemann. Generation of LR parsers by partial evaluation. *ACM Transactions on Programming Languages and Systems*, 22(2):224–264, March 2000. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/citations/journals/toplas/2000-22-2/p224-sperber/>. [STS03]
- [Ste18] Friedrich Steimann. Constraint-based refactoring. *ACM Transactions on Programming Languages and Systems*, 40(1):2:1–2:??, January 2018. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). [STSP05]
- [Ste22] Friedrich Steimann. Containerless plurals: Separating number from type in object-oriented programming. *ACM Transactions on Programming Languages and Systems*, 44(4):21:1–21:??, December 2022. CO-
- DEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <https://dl.acm.org/doi/10.1145/3527635>. [Stone:2004:EOL]
- Christopher A. Stone. Extensible objects without labels. *ACM Transactions on Programming Languages and Systems*, 26(5):805–835, September 2004. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). [Saha:2003:IAQ]
- Bratin Saha, Valery Trifonov, and Zhong Shao. Intensional analysis of quantified types. *ACM Transactions on Programming Languages and Systems*, 25(2):159–209, March 2003. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). [Shao:2005:TSC]
- Zhong Shao, Valery Trifonov, Bratin Saha, and Nikolaos Pappaspyrou. A type system for certified binaries. *ACM Transactions on Programming Languages and Systems*, 27(1):1–45, January 2005. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). [Smith:1996:PTV]
- Geoffrey Smith and Dennis Volpano. Polymorphic typing of variables and references. *ACM Transactions on Programming Languages and Systems*, 18(3):254–267, May 1996. CODEN ATPSDT. ISSN 0164-0925

- (print), 1558-4593 (electronic).
 URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/1997b/229544.html>.
- [SV19] Davide Sangiorgi and Valeria Vignudelli. Environmental bisimulations for probabilistic higher-order languages. *ACM Transactions on Programming Languages and Systems*, 41(4):22:1–22:??, November 2019. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL https://dl.acm.org/ft_gateway.cfm?id=3350618. [SWU10]
- [SV20] Alex Simpson and Niels Voornveld. Behavioural equivalence via modalities for algebraic effects. *ACM Transactions on Programming Languages and Systems*, 42(1):4:1–4:??, January 2020. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL https://dl.acm.org/ft_gateway.cfm?id=3363518. [SYK⁺05]
- [SW97a] Amr Sabry and Philip Wadler. A reflection on a call-by-value. *ACM Transactions on Programming Languages and Systems*, 19(6):916–941, November 1997. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/toplas/1997-19-6/p916-sabry/>. [SYN06]
- Steckler:1997:LCC**
 Paul A. Steckler and Mitchell Wand. Lightweight closure conversion. *ACM Transactions on Programming Languages and Systems*, 19(1):48–86, January 1997. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/citations/journals/toplas/1997-19-1/p48-steckler/>.
- Sewell:2010:NPP**
 Peter Sewell, Paweł T. Wojciechowski, and Asis Unyapoth. Nomadic pict: Programming languages, communication infrastructure overlays, and semantics for mobile computation. *ACM Transactions on Programming Languages and Systems*, 32(4):12:1–12:63, April 2010. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- Suganuma:2005:DED**
 Toshio Suganuma, Toshiaki Yasue, Motohiro Kawahito, Hideaki Komatsu, and Toshio Nakatani. Design and evaluation of dynamic optimizations for a Java just-in-time compiler. *ACM Transactions on Programming Languages and Systems*, 27(4):732–785, July 2005. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- Suganuma:2006:RBC**
 Toshio Suganuma, Toshiaki Yasue, and Toshio Nakatani. A

- region-based compilation technique for dynamic compilers. *ACM Transactions on Programming Languages and Systems*, 28(1):134–174, January 2006. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [SYH07] Sunae Seo, Hongseok Yang, Kwangkeun Yi, and Taisook Han. Goal-directed weakening of abstract interpretation results. *ACM Transactions on Programming Languages and Systems*, 29(6):39:1–39:39, October 2007. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [SZBH86] Daniel Swinehart, Polle Zellweger, Richard Beach, and Robert Hagemann. A structural view of the Cedar programming environment. *ACM Transactions on Programming Languages and Systems*, 8(4): 419–490, October 1986. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/6466.html>.
- [SZLY21] David Sanan, Yongwang Zhao, Shang-Wei Lin, and Liu Yang. CSim 2: Compositional top-down verification of concurrent systems using rely-guarantee. *ACM Transactions on Programming Languages and Systems*, 43(1):2:1–2:46, April 2021. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <https://dl.acm.org/doi/10.1145/3436808>.
- [TA08a] Tachio Terauchi and Alex Aiken. A capability calculus for concurrency and determinism. *ACM Transactions on Programming Languages and Systems*, 30(5): 27:1–27:30, August 2008. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [TA08b] Tachio Terauchi and Alex Aiken. Witnessing side effects. *ACM Transactions on Programming Languages and Systems*, 30(3): 15:1–15:42, May 2008. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [Tai79] Kou-Chung Tai. Noncanonical SLR(1) grammars. *ACM Transactions on Programming Languages and Systems*, 1(2): 295–320, October 1979. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [Tan83] Andrew S. Tanenbaum. Technical correspondence: Tanenbaum’s reply. *ACM Transactions on Programming Languages and Systems*, 5(3):499–500, July 1983. CODEN ATPSDT. ISSN 0164-0925

(print), 1558-4593 (electronic).
See [TvS82, Pem83].

Tardieu:2007:DLS

- [Tar07] Olivier Tardieu. A deterministic logical semantics for pure Esterel. *ACM Transactions on Programming Languages and Systems*, 29(2):8:1–8:26, April 2007. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).

Tsay:1995:DFP

- [TB95] Yih-Kuen Tsay and Rajive L. Bagrodia. Deducing fairness properties in UNITY logic — a new completeness result. *ACM Transactions on Programming Languages and Systems*, 17(1):16–27, January 1995. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/TCVB14200997.html>.

Tofte:1998:RIA

- [TB98] Mads Tofte and Lars Birkedal. A region inference algorithm. *ACM Transactions on Programming Languages and Systems*, 20(4):724–767, July 1998. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/toplas/1998-20-4/p724-tofte/>.

Trinder:2017:SRI

- [TCP⁺17] Phil Trinder, Natalia Chechina, Nikolaos Papaspyrou, Kon-

stantinos Sagonas, Simon Thompson, Stephen Adams, Stavros Aronis, Robert Baker, Eva Bihari, Olivier Boudeville, Francesco Cesarini, Maurizio Di Stefano, Sverker Eriksson, Viktória Fördős, Amir Ghaffari, Aggelos Giantsios, Rickard Green, Csaba Hoch, David Klaftenegger, Huiqing Li, Kenneth Lundin, Kenneth Mackenzie, Katerina Roukounaki, Yiannis Tsiouris, and Kjell Winblad. Scaling reliably: Improving the scalability of the Erlang distributed actor platform. *ACM Transactions on Programming Languages and Systems*, 39(4):17:1–17:??, September 2017. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).

Tzannes:2014:LSR

Alexandros Tzannes, George C. Caragea, Uzi Vishkin, and Rajeev Barua. Lazy scheduling: a runtime adaptive scheduler for declarative parallelism. *ACM Transactions on Programming Languages and Systems*, 36(3):10:1–10:??, September 2014. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).

Tip:2011:RUT

- [TFK⁺11] Frank Tip, Robert M. Fuhrer, Adam Kiezun, Michael D. Ernst, Ittai Balaban, and Bjorn De Sutter. Refactoring using type constraints. *ACM Transactions on Programming Languages and*

- Systems*, 33(3):9:1–9:47, April 2011. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [TGT18] Matías Toro, Ronald Garcia, and Éric Tanter. Type-driven gradual security with references. *ACM Transactions on Programming Languages and Systems*, 40(4):16:1–16:??, December 2018. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). See corrigendum [TGT20].
- [TGT20] Matías Toro, Ronald Garcia, and Éric Tanter. Corrigendum to “Type-driven Gradual Security with References,” by Toro et al., *ACM Transactions on Programming Languages and Systems (TOPLAS) Volume 40, Issue 4, Article No. 16*. *ACM Transactions on Programming Languages and Systems*, 42(2):11:1–11:2, May 2020. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <https://dl.acm.org/doi/abs/10.1145/3387725>. See [TGT18].
- [Tho94] Mikkel Thorup. Controlled grammatic ambiguity. *ACM Transactions on Programming Languages and Systems*, 16(3):1024–1050, May 1994. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [Tic86] Walter F. Tichy. Smart recompilation. *ACM Transactions on Programming Languages and Systems*, 8(3):273–291, July 1986. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/177759.html>.
- [Tic88] Walter F. Tichy. Technical correspondence: Tichy’s response to R. W. Schwanke and G. E. Kaiser’s “Smarter Recompilation”. *ACM Transactions on Programming Languages and Systems*, 10(4):633–634, October 1988. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/214507.html>. See [SK88].
- [TK94] E. Tick and M. Korsloot. Determinacy testing for non-terminating logic programming languages. *ACM Transactions on Programming Languages and Systems*, 16(1):3–34, January 1994. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/174626.html>.

- Tripakis:2011:TSR**
- [TLHL11] Stavros Tripakis, Ben Lickly, Thomas A. Henzinger, and Edward A. Lee. A theory of synchronous relational interfaces. *ACM Transactions on Programming Languages and Systems*, 33(4):14:1–14:41, July 2011. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- Tel:1993:DDT**
- [TM93] Gerard Tel and Friedmann Mattern. The derivation of distributed termination detection algorithms from garbage collection schemes. *ACM Transactions on Programming Languages and Systems*, 15(1):1–35, January 1993. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/151647.html>. [Tra08]
- Thakur:2019:PF**
- [TN19] Manas Thakur and V. Krishna Nandivada. PYE: a framework for precise-yet-efficient just-in-time analyses for Java programs. *ACM Transactions on Programming Languages and Systems*, 41(3):16:1–16:??, July 2019. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL https://dl.acm.org/ft_gateway.cfm?id=3337794. [TSBR08]
- Takisaka:2021:RRS**
- [TOUH21] Toru Takisaka, Yuichiro Oyabu, Natsuki Urabe, and Ichiro Hasuo. Ranking and repulsing supermartingales for reachability in randomized programs. *ACM Transactions on Programming Languages and Systems*, 43(2):5:1–5:46, July 2021. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <https://dl.acm.org/doi/10.1145/3450967>.
- Thammanur:2004:FME**
- [TP04] Sathyanarayanan Thammanur and Santosh Pande. A fast, memory-efficient register allocation framework for embedded systems. *ACM Transactions on Programming Languages and Systems*, 26(6):938–974, November 2004. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- Tratt:2008:DSL**
- Laurence Tratt. Domain specific language implementation via compile-time meta-programming. *ACM Transactions on Programming Languages and Systems*, 30(6):31:1–31:40, October 2008. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- Torp-Smith:2008:LRA**
- [TSBR08] Noah Torp-Smith, Lars Birkedal, and John C. Reynolds. Local reasoning about a copying garbage collector. *ACM Transactions on Programming Languages and Systems*, 30(4):24:1–24:58, July 2008. CO-

DEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).

Tip:2002:PET

- [TSL⁺02] Frank Tip, Peter F. Sweeney, Chris Laffra, Aldo Eisma, and David Streeter. Practical extraction techniques for Java. *ACM Transactions on Programming Languages and Systems*, 24(6): 625–666, November 2002. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).

Tang:2000:PTR

- [TSY00] Hong Tang, Kai Shen, and Tao Yang. Program transformation and runtime support for threaded MPI execution on shared-memory machines. *ACM Transactions on Programming Languages and Systems*, 22(4):673–700, 2000. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/citations/journals/toplas/2000-22-4/p673-tang/>.

Turini:1984:MLO

- [Tur84] Franco Turini. Magma2: a language oriented toward experiments in control. *ACM Transactions on Programming Languages and Systems*, 6(4): 468–486, October 1984. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).

Turchin:1986:CS

- [Tur86] Valentin F. Turchin. The concept of a supercompiler. *ACM Transactions on Programming*

Languages and Systems, 8(3): 292–325, July 1986. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/5957.html>.

Thies:2007:STU

- [TVA07] William Thies, Frédéric Vivien, and Saman Amarasinghe. A step towards unifying schedule and storage optimization. *ACM Transactions on Programming Languages and Systems*, 29(6): 34:1–34:45, October 2007. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).

Tanenbaum:1982:UPO

- [TvS82] Andrew S. Tanenbaum, Hans van Staveren, and Johan W. Stevenson. Using peephole optimization on intermediate code. *ACM Transactions on Programming Languages and Systems*, 4(1):21–36, January 1982. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). See remarks [Pem83].

Thatcher:1982:DTS

- [TWW82] J. W. Thatcher, E. G. Wagner, and J. B. Wright. Data type specification: Parameterization and the power of specification techniques. *ACM Transactions on Programming Languages and Systems*, 4(4):711–732, October 1982. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).

- [TY18] **Toninho:2018:ISB**
Bernardo Toninho and Nobuko Yoshida. Interconnectability of session-based logical processes. *ACM Transactions on Programming Languages and Systems*, 40(4):17:1–17:??, December 2018. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [TY21] **Toninho:2021:PSF**
Bernardo Toninho and Nobuko Yoshida. On polymorphic sessions and functions: a tale of two (fully abstract) encodings. *ACM Transactions on Programming Languages and Systems*, 43(2):7:1–7:55, July 2021. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <https://dl.acm.org/doi/10.1145/3457884>.
- [TZ07] **Tse:2007:RTP**
Stephen Tse and Steve Zdancewicz. Run-time principals in information-flow type systems. *ACM Transactions on Programming Languages and Systems*, 30(1):6:1–6:42, November 2007. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [UJ92] **Ungar:1992:ATP**
David Ungar and Frank Jackson. An adaptive tenuring policy for generation scavengers. *ACM Transactions on Programming Languages and Systems*, 14(1):1–27, January 1992. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [UM02] **Unger:2002:HIL**
Sebastian Unger and Frank Mueller. Handling irreducible loops: optimized node splitting versus DJ-graphs. *ACM Transactions on Programming Languages and Systems*, 24(4):299–333, July 2002. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [URJ18] **Ugawa:2018:TSL**
Tomoharu Ugawa, Carl G. Ritzson, and Richard E. Jones. Transactional Sapphire: Lessons in high-performance, on-the-fly garbage collection. *ACM Transactions on Programming Languages and Systems*, 40(4):15:1–15:??, December 2018. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [VALG05] **Vera:2005:ACM**
Xavier Vera, Jaume Abella, Josep Llosa, and Antonio González. An accurate cost model for guiding data locality transformations. *ACM Transactions on Programming Languages and Systems*, 27(5):946–987, September 2005. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [van88] **vandenBos:1988:AIT**
Jan van den Bos. Abstract interaction tools: a language for user

- interface management systems. *ACM Transactions on Programming Languages and Systems*, 10(2):215–247, April 1988. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/42191.html>. [VBLG04]
- [Van96a] **VanderZanden:1996:CIA**
Brad Vander Zanden. Corrigendum: “An incremental algorithm for satisfying hierarchies of multiway dataflow constraints”. *ACM Transactions on Programming Languages and Systems*, 18(3):354, May 1996. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). See [Van96b].
- [Van96b] **VanderZanden:1996:IAS**
Brad Vander Zanden. An incremental algorithm for satisfying hierarchies of multiway dataflow constraints. *ACM Transactions on Programming Languages and Systems*, 18(1):30–72, January 1996. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/225543.html>. See corrigendum [Van96a].
- [Van06] **Vansummeren:2006:TIU**
Stijn Vansummeren. Type inference for unique pattern matching. *ACM Transactions on Programming Languages and Systems*, 28(3):389–428, May 2006. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL http://www.acm.org:80/pubs/citations/journals/toplas/1997-19-5/p804-van_roy/. [VHB+97]
- Vera:2004:FAF**
Xavier Vera, Nerina Bermudo, Josep Llosa, and Antonio González. A fast and accurate framework to analyze and optimize cache memory behavior. *ACM Transactions on Programming Languages and Systems*, 26(2):263–300, March 2004. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- Venkatesh:1995:ERD**
G. A. Venkatesh. Experimental results from dynamic slicing of C programs. *ACM Transactions on Programming Languages and Systems*, 17(2):197–216, March 1995. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/201062.html>.
- VanRoy:1997:MOD**
Peter Van Roy, Seif Haridi, Per Brand, Gert Smolka, Michael Mehl, and Ralf Scheidhauer. Mobile objects in Distributed Oz. *ACM Transactions on Programming Languages and Systems*, 19(5):804–851, September 1997. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL http://www.acm.org:80/pubs/citations/journals/toplas/1997-19-5/p804-van_roy/.

- [vHK00] **vonHanxleden:2000:BCP**
 Reinhard von Hanxleden and Ken Kennedy. A balanced code placement framework. *ACM Transactions on Programming Languages and Systems*, 22(5):816–860, 2000. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL http://www.acm.org/pubs/articles/journals/toplas/2000-22-5/p816-von_hanxleden/p816-von_hanxleden.pdf; http://www.acm.org/pubs/citations/journals/toplas/2000-22-5/p816-von_hanxleden/.
- [VJB12] **Verdoolaege:2012:ECS**
 Sven Verdoolaege, Gerda Janssens, and Maurice Bruynooghe. Equivalence checking of static affine programs using widening to handle recurrences. *ACM Transactions on Programming Languages and Systems*, 34(3):11:1–11:35, October 2012. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [VHK02] **VanDenBrand:2002:CLD**
 M. G. J. Van Den Brand, J. Heering, P. Klint, and P. A. Olivier. Compiling language definitions: the ASF+SDF compiler. *ACM Transactions on Programming Languages and Systems*, 24(4):334–368, July 2002. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [VMLY22] **Vasconcelos:2022:TDM**
 Vasco T. Vasconcelos, Francisco Martins, Hugo-Andrés López, and Nobuko Yoshida. A type discipline for message passing parallel programs. *ACM Transactions on Programming Languages and Systems*, 44(4):26:1–26:??, December 2022. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <https://dl.acm.org/doi/10.1145/3552519>.
- [VHM⁺01] **VanderZanden:2001:LLA**
 Bradley T. Vander Zanden, Richard Halterman, Brad A. Myers, Rich McDaniel, Rob Miller, Pedro Szekely, Dario A. Giuse, and David Kosbie. Lessons learned about one-way, dataflow constraints in the Garnet and Amulet graphical toolkits. *ACM Transactions on Programming Languages and Systems*, 23(6):776–796, November 2001. CODEN ATPSDT.
- [Vol91] **Volpano:1991:TCS**
 Dennis M. Volpano. Technical correspondence: Subtypes and quantification. *ACM Transactions on Programming Languages and Systems*, 13(4):631–632, October 1991. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/214523.html>. See [Bur90b, Bur91].
- ISSN 0164-0925 (print), 1558-4593 (electronic).

- vandenBos:1981:PCB**
- [vPS81] Jan van den Bos, R. Plasmeijer, and Jan W. M. Stroet. Process communication based on input specifications. *ACM Transactions on Programming Languages and Systems*, 3(3): 224–250, July 1981. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- VanHentenryck:1995:BTC**
- [VR95] Pascal Van Hentenryck and Viswanath Ramachandran. Backtracking without trailing in $\text{CLP}(\mathcal{R}_{\text{Lin}})$. *ACM Transactions on Programming Languages and Systems*, 17(4): 635–671, July 1995. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/210192.html>. [Wad90]
- Vakar:2022:CCH**
- [VS22] Matthijs Vákár and Tom Smeding. CHAD: Combinatory Homomorphic Automatic Differentiation. *ACM Transactions on Programming Languages and Systems*, 44(3):20:1–20:49, September 2022. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <https://dl.acm.org/doi/10.1145/3527634>. [Wal80]
- VonBank:1994:UMP**
- [VSS94] D. G. Von Bank, C. M. Shub, and R. W. Sebasta. A unified model of pointwise equivalence of procedural computations. *ACM Transactions on Programming Languages and Systems*, 16(6):1842–1874, November 1994. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/197402.html>.
- VanNieuwpoort:2010:SHL**
- [VWJB10] Rob V. Van Nieuwpoort, Gosia Wrzesińska, Cerial J. H. Jacobs, and Henri E. Bal. Satin: a high-level and efficient grid programming model. *ACM Transactions on Programming Languages and Systems*, 32(3):9:1–9:39, March 2010. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- Waddle:1990:PTC**
- Vance E. Waddle. Production trees: a compact representation of parsed programs. *ACM Transactions on Programming Languages and Systems*, 12(1):61–83, January 1990. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/77609.html>.
- Wallis:1980:ERO**
- Peter J. L. Wallis. External representations of objects of user-defined type. *ACM Transactions on Programming Languages and Systems*, 2(2): 137–152, April 1980. CODEN ATPSDT. ISSN 0164-0925

(print), 1558-4593 (electronic).
See also corrigendum [Wal81].

Wallis:1981:CER

- [Wal81] Peter J. L. Wallis. Corrigendum: “External Representations of Objects of User-Defined Type”. *ACM Transactions on Programming Languages and Systems*, 3(1):111, January 1981. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). See [Wal80].

Wall:1992:ESD

- [Wal92] David W. Wall. Experience with a software-defined machine architecture. *ACM Transactions on Programming Languages and Systems*, 14(3): 299–338, July 1992. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/129395.html>.

Wand:1982:DTC

- [Wan82] Mitchell Wand. Deriving target code as a representation of continuation semantics. *ACM Transactions on Programming Languages and Systems*, 4(3): 496–517, July 1982. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).

Waters:1983:UFC

- [Wat83] Richard C. Waters. User format control in a Lisp prettyprinter. *ACM Transactions on Programming Languages and Systems*, 5

(4):513–531, October 1983. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).

Waters:1991:ATS

- [Wat91] Richard C. Waters. Automatic transformation of series expressions into loops. *ACM Transactions on Programming Languages and Systems*, 13(1):52–98, January 1991. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/102806.html>.

Waters:1994:CBP

- [Wat94] Richard C. Waters. Cliché-based program editors. *ACM Transactions on Programming Languages and Systems*, 16(1): 102–150, January 1994. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/174628.html>.

Wright:1997:PST

- [WC97] Andrew K. Wright and Robert Cartwright. A practical soft type system for Scheme. *ACM Transactions on Programming Languages and Systems*, 19(1): 87–152, January 1997. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/citations/journals/toplas/1997-19-1/p87-wright/>.

- Walker:2000:TMM**
- [WCM00] David Walker, Karl Cray, and Greg Morrisett. Typed memory management via static capabilities. *ACM Transactions on Programming Languages and Systems*, 22(4):701–771, 2000. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/citations/journals/toplas/2000-22-4/p701-walker/>.
- Wileden:1990:CEO**
- [WCW90] Jack C. Wileden, Lori A. Clarke, and Alexander L. Wolf. A comparative evaluation of object definition techniques for large prototype systems. *ACM Transactions on Programming Languages and Systems*, 12(4):670–699, October 1990. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/88639.html>. See corrigenda [WCW91].
- Wileden:1991:CCE**
- [WCW91] Jack C. Wileden, Lori A. Clarke, and Alexander L. Wolf. Corrigenda: “A Comparative Evaluation of Object Definition Techniques for Large Prototype Systems”. *ACM Transactions on Programming Languages and Systems*, 13(1):179, January 1991. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). See [WCW90].
- Webber:1995:OFP**
- [Web95] Adam Webber. Optimization of functional programs by grammar thinning. *ACM Transactions on Programming Languages and Systems*, 17(2):293–330, March 1995. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/201067.html>.
- Weihl:1989:LAP**
- [Wei89] William E. Weihl. Local atomicity properties: Modular concurrency control for abstract data types. *ACM Transactions on Programming Languages and Systems*, 11(2):249–283, April 1989. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/63518.html>.
- Weihl:1990:LSA**
- [Wei90] William E. Weihl. Linguistic support for atomic data types. *ACM Transactions on Programming Languages and Systems*, 12(2):178–202, April 1990. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/78944.html>.
- Wetherell:1982:EDV**
- [Wet82] C. S. Wetherell. Error data values in the data-flow language VAL. *ACM Trans-*

actions on Programming Languages and Systems, 4(2):226–238, April 1982. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).

Weyuker:1983:ATD

[Wey83] Elaine J. Weyuker. Assessing test data adequacy through program inference. *ACM Transactions on Programming Languages and Systems*, 5(4):641–655, October 1983. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).

Wagner:1998:EFI

[WG98] Tim A. Wagner and Susan L. Graham. Efficient and flexible incremental parsing. *ACM Transactions on Programming Languages and Systems*, 20(5):980–1013, September 1998. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/toplas/1998-20-5/p980-wagner/>.

Widom:1992:TBN

[WGS92] Jennifer Widom, David Gries, and F. B. Schneider. Trace-based network proof systems: Expressiveness and completeness. *ACM Transactions on Programming Languages and Systems*, 14(3):396–416, July 1992. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164->

0925/129396.html. See corrigendum [WGS93].

Widom:1993:CTB

[WGS93] Jennifer Widom, David Gries, and F. B. Schneider. Corrigendum: “Trace-Based Network Proof Systems: Expressiveness and Completeness”. *ACM Transactions on Programming Languages and Systems*, 15(1):208, January 1993. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). See [WGS92].

Whalley:1994:AIC

[Wha94] David B. Whalley. Automatic isolation of compiler errors. *ACM Transactions on Programming Languages and Systems*, 16(5):1648–1659, September 1994. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/186103.html>.

Williams:1982:DAF

[Wil82a] John H. Williams. On the development of the algebra of functional programs. *ACM Transactions on Programming Languages and Systems*, 4(4):733–757, October 1982. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).

Williams:1982:FNS

[Wil82b] M. Howard Williams. A flexible notation for syntactic definitions. *ACM Transactions*

on *Programming Languages and Systems*, 4(1):113–119, January 1982. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).

Winner:1984:UO

[Win84] Robert I. Winner. Unassigned objects. *ACM Transactions on Programming Languages and Systems*, 6(4):449–467, October 1984. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).

Wing:1987:WLI

[Win87] Jeannette M. Wing. Writing Larch interface language specifications. *ACM Transactions on Programming Languages and Systems*, 9(1):1–24, January 1987. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/10500.html>.

Wirth:1988:TE

[Wir88] Nicklaus Wirth. Type extensions. *ACM Transactions on Programming Languages and Systems*, 10(2):204–214, April 1988. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/46167.html>. See remarks [Coh91, Wir91].

Wirth:1991:TCR

[Wir91] Nicklaus Wirth. Technical correspondence: Reply to “Type-

extension tests can be performed in constant time”. *ACM Transactions on Programming Languages and Systems*, 13(4):630, October 1991. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/214521.html>. See [Wir88, Coh91].

Wise:1979:MGC

[Wis79] David S. Wise. Morris’s garbage compaction algorithm restores reference counts. *ACM Transactions on Programming Languages and Systems*, 1(1):115–120, July 1979. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).

Wright:1998:PSE

[WJ98] Andrew K. Wright and Suresh Jagannathan. Polymorphic splitting: an effective polyvariant flow analysis. *ACM Transactions on Programming Languages and Systems*, 20(1):166–207, January 1998. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/toplas/1998-20-1/p166-wright/>.

Wellings:2000:IOO

[WJS+00] A. J. Wellings, B. Johnson, B. Sanden, J. Kienzle, T. Wolf, and S. Michell. Integrating object-oriented programming and protected objects

- in Ada 95. *ACM Transactions on Programming Languages and Systems*, 22(3):506–539, 2000. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/articles/journals/toplas/2000-22-3/p506-wellings/p506-wellings.pdf>; <http://www.acm.org/pubs/citations/journals/toplas/2000-22-3/p506-wellings/>. [WM95]
- Wand:2004:SAD**
- [WKD04] Mitchell Wand, Gregor Kiczales, and Christopher Dutchyn. A semantics for advice and dynamic join points in aspect-oriented programming. *ACM Transactions on Programming Languages and Systems*, 26(5): 890–910, September 2004. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). [WM12]
- Weihl:1985:IRA**
- [WL85] William Weihl and Barbara Liskov. Implementation of resilient, atomic data types. *ACM Transactions on Programming Languages and Systems*, 7(2): 244–269, April 1985. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/3319.html>. [WN08]
- Wagner:2016:TIB**
- [WLBf16] Gregor Wagner, Per Larsen, Stefan Brunthaler, and Michael Franz. Thinking inside the box: Compartmentalized garbage collection. *ACM Transactions* *on Programming Languages and Systems*, 38(3):9:1–9:??, May 2016. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- Walicki:1995:CCM**
- Michal Walicki and Sigurd Meidal. A complete calculus for the multialgebraic and functional semantics of nondeterminism. *ACM Transactions on Programming Languages and Systems*, 17(2):366–393, March 1995. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/201070.html>.
- Wu:2012:STB**
- Xing Wu and Frank Mueller. ScalaExtrap: Trace-based communication extrapolation for SPMD programs. *ACM Transactions on Programming Languages and Systems*, 34(1):5:1–5:29, April 2012. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- Weimer:2008:ESP**
- Westley Weimer and George C. Necula. Exceptional situations and program reliability. *ACM Transactions on Programming Languages and Systems*, 30(2): 8:1–8:51, March 2008. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- Wolf:1992:GEI**
- Alexander L. Wolf. Guest Editor’s introduction to the spe-

- cial section on the Third International Conference on Computer Languages. *ACM Transactions on Programming Languages and Systems*, 14(2):145–146, April 1992. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/128863.html>. [WS97]
- [Wol94] Michael Wolfe. The definition of dependence distance. *ACM Transactions on Programming Languages and Systems*, 16(4):1114–1116, July 1994. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/183440.html>. [WSH15]
- [WP10] Peter H. Welch and Jan B. Pedersen. Santa Claus: Formal analysis of a process-oriented solution. *ACM Transactions on Programming Languages and Systems*, 32(4):14:1–14:37, April 2010. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). [WST85]
- [WR08] Tao Wang and Abhik Roychoudhury. Dynamic slicing on Java bytecode traces. *ACM Transactions on Programming Languages and Systems*, 30(2):10:1–10:49, March 2008. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- Whitfield:1997:AEC**
- Deborah L. Whitfield and Mary Lou Soffa. An approach for exploring code improving transformations. *ACM Transactions on Programming Languages and Systems*, 19(6):1053–1084, November 1997. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/toplas/1997-19-6/p1053-whitfield/>.
- Wang:2015:EAS**
- Farn Wang, Sven Schewe, and Chung-Hao Huang. An extension of ATL with strategy interaction. *ACM Transactions on Programming Languages and Systems*, 37(3):9:1–9:??, June 2015. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- Wall:1985:TCN**
- D. Wall, A. Srivastava, and F. Templin. Technical correspondence: a note on Hennessy’s “Symbolic Debugging of Optimized Code”. *ACM Transactions on Programming Languages and Systems*, 7(1):176–181, January 1985. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/215005.html>.
- Wolfe:1994:DDD**
- Welch:2010:SCF**
- Wang:2008:DSJ**

- Wehr:2011:JIT**
- [WT11] Stefan Wehr and Peter Thiemann. JavaGI: The interaction of type classes with interfaces and inheritance. *ACM Transactions on Programming Languages and Systems*, 33(4):12:1–12:83, July 2011. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- Wu:2004:ETC**
- [Wu04] Pei-Chi Wu. On exponential-time completeness of the circularity problem for attribute grammars. *ACM Transactions on Programming Languages and Systems*, 26(1):186–190, January 2004. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- Wu:1995:WCC**
- [WW95] Pei-Chi Wu and Feng-Jian Wang. A worst case of circularity test algorithms for attribute grammars. *ACM Transactions on Programming Languages and Systems*, 17(2):228–232, March 1995. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/201064.html>.
- Wegman:1991:CPC**
- [WZ91] Mark N. Wegman and F. Kenneth Zadeck. Constant propagation with conditional branches. *ACM Transactions on Programming Languages and Systems*, 13(2):181–210, April 1991. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/103136.html>.
- Ward:2007:SPT**
- [WZ07] Martin Ward and Hussein Zedan. Slicing as a program transformation. *ACM Transactions on Programming Languages and Systems*, 29(2):7:1–7:53, April 2007. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- Xie:2007:SSF**
- [XA07] Yichen Xie and Alex Aiken. Saturn: a scalable framework for error detection using Boolean satisfiability. *ACM Transactions on Programming Languages and Systems*, 29(3):16:1–16:43, May 2007. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- Xie:2020:CSA**
- [XBOS20] Ningning Xie, Xuan Bi, Bruno C. D. S. Oliveira, and Tom Schrijvers. Consistent subtyping for all. *ACM Transactions on Programming Languages and Systems*, 42(1):2:1–2:??, January 2020. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL https://dl.acm.org/ft_gateway.cfm?id=3310339.
- Yemini:1985:MVE**
- [YB85] Shaula Yemini and Daniel M. Berry. A modular verifiable

- exception-handling mechanism. *ACM Transactions on Programming Languages and Systems*, 7(2):214–243, April 1985. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/3320.html>. [YF98]
- [YB87] Shaula Yemini and Daniel M. Berry. An axiomatic treatment of exception handling in an expression-oriented language. *ACM Transactions on Programming Languages and Systems*, 9(3):390–407, July 1987. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/24052.html>. See remarks [YB88].
- [YB88] Shaula Yemini and Daniel M. Berry. Technical correspondence: “An Axiomatic Treatment of Exception Handling in an Expression-Oriented Language”. *ACM Transactions on Programming Languages and Systems*, 10(3):503–504, July 1988. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). See [YB87]. [Yin11]
- [YBL16] Paraskevas Yiapanis, Gavin Brown, and Mikel Luján. Compiler-driven software speculation for thread-level parallelism. *ACM Transactions on Programming Languages and Systems*, 38(2):5:1–5:??, January 2016. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [Yemini:1987:ATE] Shaula Yemini and Daniel M. Berry. An axiomatic treatment of exception handling in an expression-oriented language. *ACM Transactions on Programming Languages and Systems*, 9(3):390–407, July 1987. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/24052.html>. See remarks [YB88].
- [Yemini:1988:TCA] Shaula Yemini and Daniel M. Berry. Technical correspondence: “An Axiomatic Treatment of Exception Handling in an Expression-Oriented Language”. *ACM Transactions on Programming Languages and Systems*, 10(3):503–504, July 1988. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). See [YB87].
- [Ying:2011:FHL] Mingsheng Ying. Floyd–Hoare logic for quantum programs. *ACM Transactions on Programming Languages and Systems*, 33(6):19:1–19:49, December 2011. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- [Yang:1998:STE] Tao Yang and Cong Fu. Space/time-efficient scheduling and execution of parallel irregular computations. *ACM Transactions on Programming Languages and Systems*, 20(6):1195–1222, November 1998. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/toplas/1998-20-6/p1195-yang/>.
- [Yardimci:2009:MSP] Efe Yardimci and Michael Franz. Mostly static program partitioning of binary executables. *ACM Transactions on Programming Languages and Systems*, 31(5):17:1–17:46, June 2009. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).

- [YK97] **Yu:1997:NCI**
Ting Yu and Owen Kaser. A note on “on the conversion of indirect to direct recursion”. *ACM Transactions on Programming Languages and Systems*, 19(6): 1085–1087, November 1997. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/toplas/1997-19-6/p1085-yu/>.
- [YMW97] **Yang:1997:SMC**
Jin Yang, Aloysius K. Mok, and Farn Wang. Symbolic model checking for event-driven real-time systems. *ACM Transactions on Programming Languages and Systems*, 19(2):386–412, March 1997. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/citations/journals/toplas/1997-19-2/p386-yang/>.
- [Yos22] **Yoshida:2022:ISI**
Nobuko Yoshida. Introduction to the special issue on ESOP 2021. *ACM Transactions on Programming Languages and Systems*, 44(3): 13:1, September 2022. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <https://dl.acm.org/doi/10.1145/3524730>.
- [YR94] **Yu:1994:LTS**
Lin Yu and Daniel J. Rosenkrantz. A linear-time scheme for version reconstruction. *ACM Transactions on Programming Languages and Systems*, 16(3): 775–797, May 1994. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/177705.html>.
- [YS91] **Yellin:1991:ILI**
Daniel M. Yellin and Robert E. Strom. INC: a language for incremental computations. *ACM Transactions on Programming Languages and Systems*, 13(2): 211–236, April 1991. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/103137.html>.
- [YS97] **Yellin:1997:PSC**
Daniel M. Yellin and Robert E. Strom. Protocol specifications and component adaptors. *ACM Transactions on Programming Languages and Systems*, 19(2): 292–333, March 1997. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/citations/journals/toplas/1997-19-2/p292-yellin/>.
- [YS99] **Young:1999:SCB**
Cliff Young and Michael D. Smith. Static correlated branch prediction. *ACM Transactions on Programming Languages and Systems*, 21(5): 1028–1075, September 1999. CODEN ATPSDT. ISSN

- 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/articles/journals/toplas/1999-21-5/p1028-young/p1028-young.pdf>; <http://www.acm.org/pubs/citations/journals/toplas/1999-21-5/p1028-young/>. [Zav85]
- Yahav:2010:VSP**
- [YS10] Eran Yahav and Mooly Sagiv. Verifying safety properties of concurrent heap-manipulating programs. *ACM Transactions on Programming Languages and Systems*, 32(5):18:1–18:50, May 2010. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- Yang:2002:EEB**
- [YUW02] Minghui Yang, Gang-Ryung Uh, and David B. Whalley. Efficient and effective branch reordering using profile data. *ACM Transactions on Programming Languages and Systems*, 24(6):667–697, November 2002. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- Yang:2022:DDZ**
- [YW22] Albert Mingkun Yang and Tobias Wrigstad. Deep dive into ZGC: a modern garbage collector in OpenJDK. *ACM Transactions on Programming Languages and Systems*, 44(4):22:1–22:??, December 2022. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <https://dl.acm.org/doi/10.1145/3538532>.
- Zave:1985:DAF**
- Pamela Zave. A distributed alternative to finite-state-machine specifications. *ACM Transactions on Programming Languages and Systems*, 7(1):10–36, January 1985. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/2365.html>.
- Zhao:2007:FFS**
- [ZCG+07] Peng Zhao, Shimin Cui, Yaoqing Gao, Raúl Silvera, and José Nelson Amaral. *Forma*: a framework for safe automatic array reshaping. *ACM Transactions on Programming Languages and Systems*, 30(1):2:1–2:30, November 2007. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- Zhang:2005:CPT**
- [ZGZ05] Xiangyu Zhang, Rajiv Gupta, and Youtao Zhang. Cost and precision tradeoffs of dynamic data slicing algorithms. *ACM Transactions on Programming Languages and Systems*, 27(4):631–661, July 2005. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- Zhou:1996:PPC**
- [Zho96] Neng-Fa Zhou. Parameter passing and control stack management in Prolog implementation revisited. *ACM Transactions on Programming Languages and Systems*, 18(6):752–

- 779, November 1996. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/toplas/235832.html>; <http://www.acm.org/pubs/toc/Abstracts/toplas/236120.html>. [ZP10]
- Zic:1994:TCB**
- [Žic94] J. J. Žic. Time-constrained buffer specifications in CSP+T and timed CSP. *ACM Transactions on Programming Languages and Systems*, 16(6):1661–1674, November 1994. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0164-0925/197322.html>. [ZSD09]
- Zhang:2017:SSH**
- [ZMVPJ17] Danfeng Zhang, Andrew C. Myers, Dimitrios Vytiniotis, and Simon Peyton-Jones. SHerrLoc: a static holistic error locator. *ACM Transactions on Programming Languages and Systems*, 39(4):18:1–18:??, September 2017. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). [ZSO21]
- Zhuang:2007:AAR**
- [ZP07] Xiaotong Zhuang and Santosh Pande. Allocating architected registers through differential encoding. *ACM Transactions on Programming Languages and Systems*, 29(2):9:1–9:46, April 2007. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). [ZSS20]
- Zhuang:2010:OFE**
- Xiaotong Zhuang and Santosh Pande. An optimization framework for embedded processors with auto-addressing mode. *ACM Transactions on Programming Languages and Systems*, 32(4):11:1–11:41, April 2010. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- Zhong:2009:PLA**
- Yutao Zhong, Xipeng Shen, and Chen Ding. Program locality analysis using reuse distance. *ACM Transactions on Programming Languages and Systems*, 31(6):20:1–20:39, August 2009. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic).
- Zhang:2021:CP**
- Weixin Zhang, Yaozhu Sun, and Bruno C. D. S. Oliveira. Compositional programming. *ACM Transactions on Programming Languages and Systems*, 43(3):9:1–9:61, September 2021. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <https://dl.acm.org/doi/10.1145/3460228>.
- Zhao:2020:DLS**
- David Zhao, Pavle Subotić, and Bernhard Scholz. Debugging large-scale Datalog: a scalable provenance evaluation strategy.

ACM Transactions on Programming Languages and Systems, 42 (2):7:1–7:35, May 2020. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <https://dl.acm.org/doi/abs/10.1145/3379446>.

Zhou:2022:RIR

- [ZZO22] Yaoda Zhou, Jinxu Zhao, and Bruno C. D. S. Oliveira. Revisiting iso-recursive subtyping. *ACM Transactions on Programming Languages and Systems*, 44 (4):24:1–24:??, December 2022. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <https://dl.acm.org/doi/10.1145/3549537>.