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Title word cross-reference

N [RKBL19]. z [LCZL14].

-Equivalent [LCZL14]. -way [RKBL19].

2.0 [DKD21]. 2002 [Ano02]. 2013 [HP15].

Abbreviated [SRTR17]. ABC [SF18].

Able [HNRA20]. Abstract  
[PSZ21, XMA+14, Jac95a, Pon02].

Abstracting [Gun00]. Abstraction  
[AEK+16, CF03, Egy02]. Abstractions  
[PSZ21, BG98, DBGU13]. Acceleration  
[LHX21]. access [BDL06]. accommodates  
[YHR92]. Accounting [SM12]. Accuracy  
[ASNB19, CWW+20, ODE21]. Achieving  
[BJMH02, HAB13, LBZ14].

Acknowledgement [ACM05]. ACM  
[NP08]. across [CSV13]. action [HN98].

Active [ASNB19, MS15]. Activities  
[SHLW21, WFW+20]. activity [Esh06].

activitycharts [BRG+01]. Ada  
[Dii93, Dii97, DBDS94, YTL+95]. ADAM  
[GL14]. adapt [DPT13]. Adaptation  
[SEM17]. Adaptive [BS16, CLBY18, DR11,  
RPT+22, SMBO21, ZA22, HWH14, VTA04].

Addendum [HT98]. Address [Zav04].

Adequacy [GRS+16, KSD08]. Adequate  
[GGZ+15]. Admitted [RXX+19, GLL+21].

adopting [SAB+14]. Adversarial [KL21].

Affected [VCF21]. against [EWS14, IC14].

agents [MPR06]. Aggregation [SPAS21].

aggregator [BPT10]. Agile [Rus21, CF10].

AI [OHDB92]. AI-based [OHDB92]. aided
Automatic
[CGPP15, CF03, DSV03, MGTR18, NBMK22, UKR21, BRRP05, DO93].
Automatically
[CMM+15, CDKP21, Mem08, YJW+20, LS13].
Automating
[GZX+22].
Automaton
[EM18].
Autonomous
[FDC+21].
Avoiding
[Hie06].
Aware
[KAT12, MS15, VLJ+18, DFB99a, DFB99b, MGMM11, WYMW20, WXL+21].
JGB12, KATS12, KF07, NEFE03, PBO07, PMS13, SGL12, SMAC08, WGS07, XCCY10. checkpoint [CY11]. Chef [RRPW21]. Chief [Pez19d, Ros19]. Choice [EW11]. class [BM13, CTCC98, CTC01, CCX11, Egy02, LY05, PPP94, ZXLC14]. class-level [CTCC98]. Classes [AB12, VCF21, GRT09, HRD08, KB07, Kuh99, Pon02, Tiw08, TK02].


Constraints [CZ19, MWK15, QT12, SGD15, CY11, CK96, OO92]. constructing [Hen97]. Construction [ARL+15].

Constructs [KS20]. Consumption [LVBBC+18]. container [XR13].

containing [CFM00]. Context [CK96, Kat12, LH21, WXL+21, KGA+12, LH08, XCCY10, vdBV96]. Context-Aware [Kat12, WXL+21]. context-free [KGA+12, vdBV96]. context-sensitive [LH08]. Contextual [GZX12, ZSL13, LVBBC+18]. Constructs [KSD08, XL20].

Continuous [BZSW14]. Contract [YABLR20, ZOJH21]. Contracts [YQTR15]. Control [BHB16, CH21, KAS20, VHNF22, BDLO6, DL13, MSMT14, MU00, SHRO1, TBS92].

Controlled [FSM+15, PS221, BFN+14]. controllers [DBPU13]. controlling [HGSS93]. cookie [TM14]. cooperative [HE13]. Coordinating [Cia93].

coordination [CFM00, MU00, MP06, TW08]. CORBA [CPPRM03]. CORBA-based [CPPRM03].


Cost-Effectiveness [CST16].


Cross [ZYL+18, DCS09].

cross-organizational [DCS09].

Cross-Project [ZYL+18]. crosscutting [SGL12, MVM07].

cryptographic [DFG00].

CSCW [KAT12]. CSP [SLD+13].

customizable [Dev99]. CVEs [XCS+22].

Cycle [VCF21]. cycles [SS02].

Dahl [Aoo02]. dark [ZJ97]. DARWIN [QRLV12]. Data [BHB16, CQ+21, DPB17, GSYT21, KDM17, LLS+21, NWB+18, NBB15, SSB20, TTL+21, BCC+01, BG98, CW08, FK96, For94, OSH04, TZZ09, WGG13].

Data-Intensive [NW+B18]. Database [MKW15, CF03, PWX14, WGD07].

Databases [AG20]. dataflow [KSD08].

David [Ros13b]. DC [GRS+16]. Deadlines [DBNG15]. Deadlock [ABB+18, DBDS94].

Debt [RXX+19]. Debts [GLL+21]. Debug [MWP+21].

Debugging [CMM+15, FSP+13, J015, MQLR16, AM04, HRD08, OSH04, QRLV12]. Decentralized [EWF20, ML00]. Deciding [SGD15].

Decision [HGW+16]. Decisions [LLS+21, AM11]. decoupling [BT14].

deduction [FS93]. deductive [GM01].

Deep [CWW+20, CW+21, LGX+22, MPT+21, NBMK22, WXL+21, ZZX+21].


Defects [AVY11, FAP22, VCF21].

Degree [FMMH+14].

Degree-of-knowledge [FMMH+14]. Delta [HT98, HVT98].

Denoising [BXX+20].

Dependence

[FCCL21, PXJ17, Dill97, SHRO1, SRK06].

dependencies [Jac95a, OSH04].

dependencies [BGO+14, Gun00, Rob08].

Dependency [SEM17, CY11, GL14].

dependency-based [CY11].


Depth [XCS+22, ZXLC14].

Derive [YBL15, XM08]. derived [IWY00].

Description [Bjo19, DvdHT05, Djo7].

Descriptions [JZL19a, AAG95, BAD08, WJ10].
descriptors [DER10]. DESEN [KAS20].


E3 [JPL98]. Eagle [LHX21]. Early [KDM17]. Easier [CMM+15]. Easy [ZWCH21]. Ecosystems [BKHT21]. editing [BGdV92]. Editor [Pez19d, Ros19]. Editor-in-Chief [Pez19d, Ros19]. Editorial [DR15, GMRS03, Ghe05, Ghe07, Not07a, Not07b, Not07c, Not08a, Not08b, Not09, Not10, Not12, Not13, GKW05, Pez19d, Pez19a, Pez19b, Pez19c, Pez20a, Pez20b, Pez21, Ros13a, Ros14c, Ros14a, Ros14b, Ros16, Ros17, Ros18a, Ros18b, Ros19]. Edsger [Ano02]. Effect [GRS+16, HZBS14, RST+14, ZSL+13, Off92, Sin10, XLC14]. Effect-Oriented [ZSL+13]. Effective [FYD+08, RD15, ZOJH21, CF10, FCLL21, Hen97, REM+04]. Effectiveness [CST16, CMM+15, GRS+16, MKW15, ODE21, CM08]. Efficiency [CMM+15, LH02]. Efficient [AGRR19, AVY11, CWW+20, FPGA07, SRK06, dFLSV14, RH97]. Efficiently
[GHM18, RKBL19, SGR+15, WFF+19].

Family-based [RKBL19]. Fan [VMM07].

Fan-In [VMM07]. Farewell [GLL+21, ZYL+18].

Fault [Ros19]. AROK21, EKL+19, KMYK19, Kuh99, NBK22, TSPRC18, YHC13, YXK+17, CCX11, Hie02, Hie09, KB07, LY05, MA14, SMT92, TK02, XCKX13, ZXL14.

Fault-Prone [AROK21]. Faults [HZBS14, SRTR17, LS13]. Faulty [SYA21].

Feature-Guided [CLBY18]. Features [JZL+19a, KMYK19, DR10, Zav04].

feedback [GJ08]. FEMOSAA [CLBY18].

Field [DPB17, JO15]. finding [CS08].

Fine [PGZ+20, BRRO1, DL13].

Fine-grained [PGZ+20, BRRO1, DL13].

Finite [BM13, EM18, Cor00]. Finite-State [EM18, Cor00]. First [DR15]. Fixing [SRTR17, TWB+19]. FlagRemover [BHL11]. flags [BHL11]. Flaky [PKHM22].

Flexible [NEFE03, BTI14]. Floating [BCGB21]. Floating-Point [BCGB21].

Flow [CHI21, DCCN04, Cor94].

flow-sensitive [For94]. flows [MP09].

Focused [MJS+21]. Follow [STS+18].

Foraging [FSP+13]. Formal [BP05, CTA+21, CR94, EWS14, GSX21, RO18, YJW+20, AG97, AG98, BRRO5, BKM07, CS12, CMCP+99, CRST12, CPPRM03, FP02, MMST14, PG12, SCK13, VTA04, SB06]. Formalizing [AA95, CD98, BP98, CDFG96]. formally [CMCP+99]. formatters [vDBV96].

Formed [TC20]. formulas [XCKX13].

forward [Ros13a]. foundation [SCK13].

Foundations [KF07]. Four [ZJ97, CD98].

frames [KK04]. Framework [AEK+16, CTA+21, DR11, KAT12, MS15, YBL15, BCTW96, CDP04, CDFG96, Dev99, For94, MS03, SGL12, WGG13]. free [KGA+12, vDBV96]. Freedom [ABB+18].

front [Dev99]. front-end-retargetable [Dev99].

FSMs [HT17]. Full [SRTR17].

Full-Word [SRTR17]. Functional [Bro93, GD08, RST+14, MGP+13].

Functions [BCGB21, Hie09, MPG+13, VK03].


Gas [ZOHJ21]. general [CCX11].

Generated [CMM+15, LS13, WGSD07].

Generating [ARG17, DRW96, GXX+20, HT17, IC14, SSB20, YJW+20, KI93].

Generation [ARC19, AG20, BFFG19, FA14, FMM+15, GXX+22, GSYT21, HLL+20, HAB+20, MGTR18, SMBO21, WXL+21, ZA22, vDBV96, EF05, FK96, FRB+06, HZS08, PWX14].

Generative [KAT12].

Generator [RKWF14, D093]. Generic [CWM+20, LL00]. Genetic [DBNG15, XKK+17]. GENOA [Dev99].


Google [CCH+21].

governed [M00]. GQM [FLM+98].

grained [BR01, DL13, PGZ+20].

grammars [KGA+12]. grammarware [KL05].

Graph [ARL+15, CWH+21, NBMK22, PTY95, MNGL98]. graphical [DLM+04, MRK+07]. graphs [SRK06].

GreASE [dFLSV14]. growth [JMS08].

guarantee [CAC08].

GUI [Mem08, XM07, XM08].

GUI-based [XM07].

Guide [HAB+20]. Guided [CLBY18, PWX14, TCDZ19].

Guidelines [GGX+15, FLFW22].

GUIs [LVBC+18].

HAMP [KGA+12]. handle [LLY14].

handlers [CWP13].

Handling [AG20, ZE14]. hard [CAC08].

HCSP [YJW+20]. healing [CWP13].

Help [FMM+15]. heterogeneous [M00].

Heuristic [ZHO+18, ZZX+21].

Hierarchical [YWC16, B092, SLD+13, WJ10].

hierarchies [CCX11]. hierarchy
9


KBSE [DJ97]. Key [SAB+14]. Killing [CPCT21]. KLEEspectre [WCB+20]. Knee [CLBY18]. Knee-Driven [CLBY18]. Knowledge [CH21, GZX+22, FMMH+14, KK04, MG00]. knowledge-based [KK04, MG00]. Kristen [Ano02].

Label [VCF21, ML00]. Language [AROK21, WB13, BGqV92, CL94, CFM00, GZ05, JPL98, SH095, TY02, WAF00, MRR02]. language-based [BGqV92, WAF00]. Languages [Bjo19, BJMH02, BHR95, CDSM10, DvdHT05, HZS08, KSD08, RSB05, vdBV96].

Larch [CL94]. Larch/Smalltalk [CL94]. Large [BN14, DNRN15, FA14, LJJ+20, Rus21, MC08, PSV01]. Large-Scale [BN14, FA14, Rus21, PSV01]. latent [BGO+14]. Lattice [DDE11].

Lattice-Based [DDE11]. Law [MU00]. Law-governed [MU00]. laws [LSV08]. layers [SB02]. lazy [FC00]. leak [XR13]. Leakage [WCB+20]. Learn [KMYK19].

Learn-to-Rank [KMYK19]. Learning [ASN19, BS16, DK21, FCL21, HGW+16, LGX+22, MPT+21, MS15, NMBK22, TWB+19, WLS+20, ZLW+21, ZZX+21, BG96, MY13]. Learning-based [ZZX+21]. legacy [THHH06]. Less [PBU16]. Level [BN14, DG18, AM04, CTCGCC98, KSD08, MMST14, Sin10]. levels [CTC01].

Leveraging [CH21, VCF21]. lexical [MN96]. libraries [ZW95]. Library [DKD21, OHDB92]. Life [VCF21, SS02]. Lightweight [GH18, MN96, Jac02]. LIME [MRR06]. Line [CTA+21, DL11, ZCT18]. Linear [SP18, ZAW92]. Lines [HLL+20, HAB+20, XZZL18, BJMH02, KATS12, MPG+13].

Linking [KS02, SZH+19, FC00]. links [DFOT07]. Literature [SBKM21]. liveness [DBPU13, SGE00]. Local [ABB+18, TC20]. Localisation [YYX+17]. Localization [AFHC22, KMYK19, TSPRC18, MA14, XCKX13, YHC13]. locating [TD01].

Location [RWEB19, PGM12, ZZL+06]. Logic [BMM+17, DKM+94, PMS13, TPT13, ZS97]. Logic-Based [BMM+17]. logical [FGL+12, MS94]. logics [DJ97]. looking [Not13, Ros13a]. loop [BH1].


math [BCGB21]. math.h

Memory
[AEK+16, NWB+18, XCS+22, MR+13, MMM11, RBL+01, SCK13, ZJW03].

Method
[AJZL18, CTC01, DCS10, FGL+12, FRB+06, HGS93, KSD08, MPR+13, MGMM11, RBL+01, SCK13, ZJW03].

Methodology
[GLFW22, MGMM11, RBL+01, SCK13, ZJW03].

Metrics
[BS07, CS12, HE13, SPAK10].

Migration
[CSW21, SPK14].

Mined
[GXG09, MGMM11, MIN11].

Minimization
[BLB16, DNRN15, KL21, PZS+19, SPK14].

Mining-based
[PZS+19, MM13].

mitigation
[MB14].

Mixed-methods
[Rus21].

Mobile
[JZL+19a, RMP97, ZE14, CFM00, FGMP03, FC00, MZ09, MR99, PRM01].

Mobility
[JZL+19b, MGMM11, MM13].

Mockups
[RST+14].

Model
[AFHC22, ASNB19, BS16, BDLO6, BSO7, BHBB16, C Stephen21, DG17, EBE+14, GRS+16, GTD21, DGD+19, GGRR+18, MMST14, NBB15, OKP+19, PVWH+17, LDUD13, RSZ21, TSPRC18, WO15, BKM07, BGL00, CS12, CAI95, CDEG03, CW99, DI93, ESH06, FGMP03, HAB13, JGB12, KG17, LL00, MS03, MN96, MPR+19, M00, NLR11, PBO+07, RVMRM04, SMAC08, SS06, SGE00, TZZ20, VAT10, XSM08].

Model-Based
[AFHC22, MMST14, HAB13, MS03, SS06, TZZ20].

model-checking
[BGL00, CDEG03, FGMP03, KS07].

Model-Driven
[DG17, GTD21].

Modeling
[BRG+01, FGMP03, MFLL12, MR+09, MRR+02, SLD13, BCFM+06, BAD18, CDP+04, DCS09, DHW98, PWD19, SB02].

Modelling
[BZSW14, Bjo19, GDC14, DG12, Jl19].

Modular
[SGR+10, WLS+10, DvdHT05, FC00].

Modularity
[CS12, HE13, SPAK10].

modifiability
[SGG09].

Modern
[SB00].

Molecular
[MFLL12, PTO95, SGG14].

Multilevel
[AROK21, BS16, CDEG03, CLBY18, DG18, LVB00, OKS+16, SYA21, XL20, ZHO18].

Multicriteria
[OKS+16, XL20].

Multi-Languages
[AROK21].

Multi-Objective
[DG18].

Multimodal
[AROK21, BS16, CDEG03, CLBY18, LVB00, OKS+16, SYA21, XL20].

Multi-Step
[BS16].

Multi-Valued
[CDEG03].

Multiagent
[DL11, ZJW03].

Multidimensional
[GL11].

Multilevel
[DGC14].

Multimodal
[MHK11].

Multinational
[Tiw08].

Multiobjective
[MY13].

Multitolerant
[EM11].

multi-user
[KK93].

multiview
[PB07].

mutant
[OLR+96]. Mutants [CPCT21]. My [CCH+21, CXH+21].


Obfuscation [GHM18].
Obfuscation-Resilient [GHM18].
Obituary [Ano02]. Object [AB12, GGGu21, LHX21, MS94, TG11, Ca95, CTCC98, CTCo1, CSc06, DBF99a, DF94, Jac02, MRR05, RS09, RM03, SS02, SB02]. Object-Oriented [AB12, MS94, CTCC98, CTCo1, CSc06, DBF99a, DF94, RS09, RM03, SB02].
Object-Sensitive [LHX21]. object [DFB99b]. object-oriented [DFB99b]. Objective [CLBY18, HLL+16, HLL+20, LVBBC+18, MKS+15, SHLW21, TAA+19, XZZL18, ZHO+18, SYA21, XL20].

obliviousness [HE13]. OBSERV [TY92].

Observeable [HT17]. observational [PSV01]. OCL [QT12]. Ole [Ano02].

Ole-Johan [Ano02]. Open [BKHT21, CWM+20, RGCS14, WFW+20, MFH02, Sin10]. Open-Source [RGCS14, Sin10]. Operational [SHZ+19].

operators [OLR+96]. opinion [CF10].

Optimal [HLL+16]. Optimization [CLBY18, HLL+16, LVBBC+18, XZZL18].

Oracles [WPB19, XM07]. Orchestra [TS09]. Order [GXSC21, SGD15, LWF03, TPT13].

organized [DCS09]. Organized [ZWCH21]. Oriented [AB12, ZSL+13, AM11, CTCC98, CTC01, CSC06, DBF99a, DFB99b, DFB94, DR10, FGL+12, HE13, DGK21, MS94, ODV+09, RS09, RM03, SB02, SGR+10]. OSS [ZMM+16]. outcome [GJ08]. Outgoing [Ros19]. output [KM10, QNR13]. Overflow [ARG17, DLRA15, GXG+20, ZWCH21]. overlapping [Ha92].

Pacemaker [BZSW14]. Pan [BGdV92].
Parallel [HT17, KK93, PSV01, RD15, ZCH22, SMAC08]. Parameter [TG11].
Path- [TPT13].
Path-Sensitive [SGD15]. Paths [YW+16].

Pattern [CZ19, SGR+15]. Pattern-based [CZ19]. Patterns [KAS20, DDGR18, ZB13].

Perspective [SF+13]. pervasive [MZ09, XCCY10]. phase [JGB12].

pointers [OSH04], points [LH08, MRR05],
points-to [LH08, MRR05], Policies
[BBX16, BKHT21, BLW09]. Polychronous
points-to [LH08, MRR05]. Polynomial
[GGLT07], Polynomial [NKWF14],
Popular [CCH +21], Portfolio [MPG +13],
Post [CDKP21, JMS08]. Post-release
[JMS08]. Posteriori [DG17]. Posts
[ARG17], potentially [ZXL14]. Power
[LSV08]. Powered [ZOJH21, CCY +21],
Practical
[BCGB21, CW +20, SZH +19, SSB20],
practice [ELvdH +05]. Practices
[BKHT21], pragmatic [HW12]. Precise
[AB12, KMK19, LRC14, XR13],
Precision [LHX21, PSW +20],
Precision-Preserving [LHX21],
Predicting [LJL +20, MB +17, ZHZ +21],
Prediction [CXH +21, FAP22, SMY19, ZL13, ZYL +18, ZXLC14], Predictions
[ZZX +21], Predictive [LRC14, HZZ13],
preliminary [YTL +95], presence
[FYD +08, FC00, Hie02, OSH04],
Preserving [LHX21, YHR92], Prevalence
[MA14], PRIME [PWD +99, MGMM11],
Principles [Bjo19], Prioritization
[EM15, HZZ +14, ZZY +21, ZCH22, YHC13],
Privacy [BBS16, ML00], Probabilistic
[EM18, PBU16, JGB12], Problem
[SKBD14, XL20, HKMB +14, MY13],
procedure [BHR95, MGP +13], Process
[BCFM06, PVHW17, LUDUD13, TC20],
ACF97, BCD02, BAD08, CW99, DHW98, GRT90, JPL98, ODV +09, PWD +99, SR05, SHO95], process-centered [ACF97],
process-integrated [PWD +99],
process-oriented [ODV +09]. Processes
[HGW +16, Cia93, CW98, DCS09, FGMP03],
processing [ATW94, Bre95], Product
[CTA +21, DL11, HLL +16, HLL +20, XZZL18, ZCT18, BJMH02, KATS12, MC08],
product-lines [BJMH02], production
[TBS92], products [JMS08], profiling
[XR13], Program [ASJWD21, BHR95, CH21, GWD +21, GR5 +16, MTRK14, RKB19, YWC16, YB20, BG96, BGH07, BG98, DBGU13, EF05, GN93, HZS08, KM10, LH02, OSH04, SLB +21, YHR92],
Programmed [EKL +19], Programming
[DBNG15, BXX +20, CW +20, KS20, KAT12, MZ09, SP18, XL20, YXK +17, HE13, Kli93, RSB05, SHO95], Programs
[BCGB21, EK11, GXSC21, GSYT21, IC14, KMK19, NBMM22, CTC98, CF03, Cor00, DF94, FC00, HZZ13, MP09, PTY95, QRL12, SMAC08, TS09, YTL +95],
Progressed [GL +21, ZYL +18]. Project
[ZYL +18, Sin10], Projections [MQLR16],
Projects
[FAP22, RGCS14, WFW +20, ZMM +16],
Prone [AROK21], Proof [FC00, RO18],
proofs [KKLS02], Properties
[EHF20, LBZ14, CK99, DCCN04, FPB +05, JGB12, Sin10, SGE00], Property
[CSV13, DDE11, NBB15], Protecting
[ML00], protocol [Ber94, Pet97], Protocols
[GGGU21, CJM00, DFG00, PBCT10],
prototyping [TY92], Prove [RO18],
provenance [MGMM11],
provenance-aware [MGMM11], psc2code
[BXX +20], Psychometrics [GLFW22],
Publication [DR15], purely [FPB +05],
PVS [MPF14], Python [HAB +20],
Q&A [UKR21], Q8A [GXLG21], QoS
[VTA04], QoS-enabled [VTA04],
Qualitative [AMS +18], Quality [AAP +20, CDPK21, MB +17, CF03, GL14, MGP +13],
Quantifying [GZSW19], quantitatively
[CW99], queries [WGSD07], Query
[LXL +22, MB +17, PJRR10, WGG13],
Question [GXG +20, GXLG21], questions
[KM10], Quo [WFF +19], QVM
[AVY11],
Race [RD15], Random [TAA +19], Rank
[KMK19], rationale [FBC +13, YTL +95],
Reachability
[LHX21, CK96, CK99, PTY95], reactive
[FS93], real [Ca95, FM94, FP02, GGLT07],

MRK+97, Ost99, Pon02, SLD+13, WME93].
real-time [Cal95, FM94, FP02, GGLT07, MRK+97, Ost99, Pon02, SLD+13, WME93].
Really [FSM+15]. Reasoning
[EBE+14, FPB+05, GZ95, PRM01, CAC08, HN98, RMP97, VTA04]. Recall [PSW+20].
Recommendation [GXLG21]. Recommendations [OPK+21].
Recommenders [AM11]. Recommending
[DR11, JZL+9a, SYA21, STS+18]. recompilation [ATW94, Bre95].
Recomposition [BBS16]. Reconciling
[SN92]. Recovering [DFO07], reduce [Cor00]. reduce [Ber94, Pet97]. Reducing
[AM11]. reduction [DBDS94].
Redundancy [CGPP15, HZZ13].
Reengineering [Sne96, CF03]. Refactor
[PZS+20]. Refactoring
[DG18, FSP+13, OKS+16, VBZ+18, SGL12]. referees [ACM05]. reference [BCC92].
Refinement [ASJDW21, Ost99]. refinements [SB02]. Reflection
[LTX19, SLB+21]. reflective [LL00]. region
[DER10]. RegionTrack [MWP+21]. regression
[BRR01, GHK+01, Mem08, RH97, REM+04].
regular [KGA+12]. Regulation [KAS20].
Regulatory [GL11]. Reifying [Jez99]. reimplementation [CF03].
Reinforcement [FCLL21]. Relatedness
[MB15]. Relational [MKW15, FPB+05].
Relative [HAB+20, MB20]. Release
[ZHO+18, HKMB+14, JMS08]. relevant
[MPG+13]. Reliability
[ZLI3, JMS08, PMM+99, Wey96].
Remodularization [CBRO16, MKS+15].
Removing [LCZL14, HZZ13]. Repair
[GWD+21, NNB15, OPK+21, PVWH17, YABL12, YR20]. repairing [Mem08].
Replicability [LGX+22]. Replication
[RRPW21]. report [AM11]. Reports
[KS20]. repositories [Hen97]. Repository
[DNRN15]. Representation
[EW11, WLW+20]. representations
[BGL00]. Representing [RM07, DER10].
Reproducibility [LGX+22]. Reproducing
[JO15]. Required [LK14]. Requirements
[DPB17, GL11, DGD+19, RST+14, WFF+19, ZZY+21, CRST12, CD98, GM01, GZ05, HJL96, SMT92, SR05, UFG14, ZJ97].
Resampling [SMY19]. Research
[SF18, EAS08, ELvH+05, RSB05].
Residual [LRCS14]. Resilient [GHM18].
Resistance [GZSW19]. Resolution
[BFFG19]. Response [GZ+22, TAW95].
REST [ZA22]. RESTful [Arc19].
restructuring [BG98, GN93]. results
[DQ93, PJR10]. retable [Dev99].
Retention [ZMM+16]. Retrieval
[MBH+17, SURL11, WX+21, ZWCH21, DFO07, PMG12]. Retrieval-based
[WX+21]. Retrieving [PP93]. reusable
[BO92, PP93]. Reuse
[FSP+13, DGD+19, VHN92, EF05, Hen97, HW12, MC08, OHDB92]. reverse [AM04].
Review
[GZ+22, RGS14, SBM21, HBB+09].
Reviewers [ACM03]. Reviews [CCH+21].
revisit [CCX11]. revisited [GD08].
Revisiting [MB20]. Rewards [PBU16].
rewriting [VKV03]. RFC [TCD19].
RFC-guided [TCD19]. rich [RKBL19].
Risk [GL11, LBZ14, XCKX13]. Role
[SPAS21, GJ08]. router [CR94]. rule
[Cia93, Kip92, MM13]. rule-based
[Cia93, Kip92]. Rules
[AR21, MFLL12, KKO4]. Run [ZH+21].
Run-time [ZH+21]. Runtime
[AVY11, BLS11, EKL+19, XMA+14, BLW09].
Rust [XCS+22].
SAEO [GSYT21]. safe
[BRR01, BTI14, RH97]. Safety
[XCS+22, BFN+14, CK99, SGE00, SRK06].
SAFKASI [WAF00]. Sample [ZLW+21].
Sampling [DDE11, PP93, PPM+99].
Sanity [WYMW20]. SAT
[AG19, XZZL18]. SAT/SMT [AG19].
satisfiability \[BM13, PMS13\]. Sator \[BPT10\]. Scala \[ARL+15\]. Scalable \[FC LL21, XAM+14, BRRP05, HKMB+14, HAB13\]. Scale \[BNB14, DNRN15, FA14, LJJ+20, VIJ+18, PVS01, Rus21\]. Scaling \[HZZ13, LCZL14\]. Scenario \[UKR21, UKM04, WJ10\]. scenario-based \[UKM04\]. Scenarios \[MHK11, UKM04\]. Schedule \[MQL16\]. Schema \[MWW15, NL11\]. Schemas \[QT12\]. scientific \[CY11, EF05, LYYC14\]. Scope \[MB20\]. Scores \[RO18\]. Screen \[RST+14\]. Screencasts \[BX+20\]. Scripts \[RRPW21, RO18\]. SEADS \[FC LL21\]. Search \[AAP+20, AG22, BS16, CXX+20, OKS+16, SYA21, SMBO21, SURL11, SED14, TC20, XL20, ZHO+18, ZYY+21, ZA22\]. Search-Based \[OKS+16, SMBO21, ZAA22, AAP+20, AG22, XL20\]. Searching \[LXX+22, MP+13, ZXX+21\]. second \[TPT13\]. second-order \[TPT13\]. section \[NP08\]. Security \[RRPW21, RPT+22, ZSW+22, BDL06, BLW09, CJM00, WAF00\]. segments \[LS13\]. Selection \[HLL+16, MPT+21, BRRO1, CY11, GHK+01, RH97\]. selective \[ATW94, Bre95\]. Self \[CLBY18, GLL+21, RXX+19, PJRR10\]. Self-Adaptive \[CLBY18\]. Self-Admitted \[RXX+19, GLL+21\]. self-assessment \[PJRR10\]. Semantic \[BAD08, MB15, PJRR10, MG00\]. Semantics \[EHF20, LXX+22, LK14, SZH+19, HHH6, YHH92\]. semantics-preserving \[YHR92\]. Sensing \[BZSW14\]. Sensitive \[LHXX1, SGD15, Bro93, Cal95, For94, LH08, TPT13\]. Sensitivity \[LHXX1, HKMB+14, MRR05\]. Sentiment \[CCY+21\]. Sequence \[RGS12, LK14, Mem08\]. sequence-based \[Mem08\]. Sequences \[HT17\]. sequencing \[OO92\]. Sequential \[LXX+22\]. Serializable \[MWP+21\]. service \[BPT10, DPT13, FGL+12, HW HH14, PBCT10\]. service-oriented \[FGL+12\]. Services \[ZL13, BKM07\]. sets \[Hi02\]. Shadow \[KPC18\]. shape \[Cor00\]. Should \[CCH+21\]. shuttle \[CD98\]. Side \[EWS14, GZSW19\]. Side-Channel \[EWS14, GZSW19\]. signal \[BRG+01\]. Signature \[ZG95\]. Significant \[HZBS14\]. similarity \[OHDB92\]. simplified \[JW94\]. Simulating \[FS93\]. Simulation \[EHF20, KKL02\]. Single \[ZCT18\]. SIP \[HLL+16\]. Site \[GXL21\]. Sites \[UKR21\]. size \[BGH07, GD08, HGS93, MPG+13, TZZ09, ZXXC14\]. slice \[BGHO7, MB07\]. slice-based \[MB07\]. slices \[BFN+14\]. Slicing \[XMA+14, GSH07, LH02, TD01\]. slicing-based \[TD01\]. Small \[HZZ14, Si01\]. small-world \[Si01\]. Smalltalk \[CL94\]. Smart \[YABLR20, JOHJ21\]. SMC \[SGE00\]. Smell \[SKBD14\]. Smells \[AROK21, HZBS14, RRPW21\]. SMT \[AGRR19, CH21\]. Snippets \[GZX+20\]. Sociotechnical \[KAS20\]. Software \[AAP+20, BNB14, BKHT21, BOH18, CBRO16, CTA+21, CLBY18, CCY+21, CWH+21, CSW21, CW99, CFL+16, CZ19, DHWH98, DR15, DNRN15, EWS14, EM18, EF05, EW11, FST+15, GZSW19, GLFW22, HLL+20, HH95, KPC18, LGX+22, MFL12, MBH+17, MY13, MB20, MKS+15, MP14, OKS+16, RKBL19, RGS14, SP18, STS+18, SBM21, SMY19, SF18, SGdWG22, VHNFW22, WB13, WPB19, WO15, XZZL18, XL20, YQTR15, ZSHD20, ZHZ+21, AAG95, ACJ97, BCTW96, BO19, BGO+14, BCD02, CS12, CT01, CM08, Ci03, CW08, CDP04, CD08, DvdHT05, DFO07, DCCN04, ELN+92, ELvdH+05, FKF96, FLM+98, GJ08, Gun00, HBB+09, Hen97, HW12, JPL98, JMS08, KKK93, LASL13, LSV08, MMST14, MRRR02, MSW12, MFH02, MC08, NLR11, NP08, Off92, ODV+09, PVS01, PP93, PMM+99, PSMV98, Rob08, RSB05, SRK06, SN92, SHO95, TZZ09\]. software \[Tiw08,
TBS92, UFG14, VD13, WP93, WGG13, 
XM07, XR13, ZW95, ZW97, DKD21].
Software-2.0 [DKD21].
Software-engineering [XL20]. Solution 
[LIL+20]. Solutions [LLS+21, XL20].
Solved [XCS+22]. solver [KGA+12].
Solvers [XZZL18]. Solving 
[AGRR19, CH21, SSB20, SED14, XL20].
Some [HZBS14]. Sound [MWP+21, XL20].
Source [BKHT21, CWM+20, DNRN15, 
HNRA20, KS20, MB15, PZS+20, RGCS14, 
SRR+15, SRR+17, SED14, WLS+20, 
WFW+20, Dev99, DER10, MFH02, MN96, 
RM07, SGG+14, Sin10, SAB+14].
Source-Code 
[DNRN15, SGR+15, SGG+14]. sources 
[PSPV98]. Space 
[STS+18, CD98, DBDS94]. Special 
[HP15, MP14, NP08]. specialization [SS02].
Species [Boeh18]. specific 
[BJHMH02, BGL00, HZS08, SS06].
Specification 
[KAS20, KL21, ZW97, Bro93, CDSM10, 
CL94, CH94, ELN+92, FN03, Kuh99, LY05, 
MS94, PP94, RMP97, TK02, WME93].
specification-based [Kuh99, LY05, TK02].
Specifications [EHF20, PSW+20, CCX11, 
DSV03, FM94, HJ96, HRD08, HN98, 
Jac95b, KB07, MMST14, MS03, Pon02, 
PMS13, UKM04, WP93, FPAG07]. specify 
[CFM00]. Specifying [PSZ21, DKM+94].
spectra [NLR11]. spectra-based [NLR11].
Spectrum 
[TSPRC18, YXK+17, MS12, XCKX13].
Spectrum-Based 
[TSPRC18, YXK+17, XCKX13].
Speculative [WCB+20]. Speed [ODE21].
Speeding [TTL+21]. spi [DSV03, ZSW+22].
Splitting [LLS+21]. spreadsheet 
[FRB+06]. spreadsheets [RBL+01]. SQL 
[AG20]. SSL [TCDZ19]. SSL/TLS 
[TCDZ19]. Stack 
[AEK+16, ARG17, GXG+20, ZWCH21].
STADS [Boeh18]. State 
[EM18, MS14, PSZ21, RWEB19, WB13, 
Cor00, DBDS94, WJ10]. State-Based 
[WB13]. statecharts 
[BRG+01, HaK92, HN96]. stateful 
[SLD+13]. STATEMATE [HN96]. States 
[LCZL14]. Static 
[HNRA20, IWY00, KMYK19, RD15, 
RWEB19, RM03, VLJ+18, WGS07, BGH07, 
FPB+05, GSH97, MNL98, O092, ZZL+06].
Statically [CWH+21]. Statistical 
[RGCS14]. Status [WFF+19]. Step 
[BS16, SLB+21]. Stepwise [EK11].
Stochastic [CFL+16]. strategy [JW94]. 
stratified [PMM+99]. StreamGen 
[GTD21]. Streaming [GTD21]. strength 
[MP09]. Stress [DBG15]. string [TP13].
strings [KGA+12]. Structural [Kip92].
Structure [GRS+16, WB13, RM03].
structured [BP98]. Structures [KDM17].
Structuring [Jac95b]. Stubborn 
[CPCT21]. Studies [Cai20, SPAS21, BM07, 
CD98, HBB+09, MFH02]. Study 
[AROK21, CWM+20, CCH+21, DKD21, 
EHEZ21, FAP22, FSM+15, GLL+21, LLS+21, 
ODE21, OKS+16, PZS+20, RRPW21, 
Rs12, TTL+21, TBW+19, VLJ+18, 
XCS+22, ZOJH21, ZE14, ZHO+18, ZA22, 
ZMM+16, BJHM02, BRR01, BGH07, CF10, 
GHK+01, MB07, MNL98, PVS01, SMT92, 
SR05, Tiw08, TBS92, XM08, ZXL14].
style [AA95]. Subject [DPB17]. Success 
[Rus21, Sin10]. sufficient [OLR+96].
Suggestion [ODE21]. Suite 
[HLL+20, Ber94, HGS93, Pet97, REM+04, 
XL20, YTL+95]. Suites [GGZ+15, Mem08].
Summaries [PXJ17]. Summarization 
[CXH+21]. Support 
[DBG15, JO15, SURL11, ZCT18, BFN+14, 
HWH14, MS03, RM03]. Supporting 
[BG98, DR10, Han09, MPR06]. Survey 
[PKHM+22]. Surveys [WFF+19].
Sustainability [Cai20]. Symbolic 
[AEK+16, BHB16, CPCT21, Esh06, KPC18, 
LCZL14, RGS12, WCB+20, YPRK14, 

16
BGL00, CDEG03, QNR13, SMAC08.
symmetry [SGE00]. symmetry-based [SGE00]. symposium [NP08].
Synchronisation [AGRR19]. synthesis [MMST14]. synthesized [PWX14].
Synthesizing [DBPU13, WJ10, DL13]. Synthetic [SMY19]. SysML [BFN+14].
System [AG20, BLX+20, LBZ14, PBU16, SSB20, ZAZ22, ZCT18, BGdV92, CDSM10, IWY00, MMST14, MG00, OHDB92, RVMRM04, TBS92, WME93]. system-level [MMST14].
Systematic [SBMK21, VHNF22, HBB+09, MS03]. Systematizing [HW12]. SystemC [YJW+20]. Systems [AMS+18, AGRR19, AFHC22, AVY11, BNB14, CWM+20, DL11, DPB17, EKL+19, FDC+21, FCLL21, KAS20, MPT+21, NWB+18, PSW+20, SYA21, TG11, YBZX21, ZHZ+21, B092, BCD02, Bro93, Cal95, CMP13, CY11, CFM00, CRST12, CDFG96, DFO707, DJ97, DKM+94, DCCN04, FM94, FP02, FS93, GM01, JGB12, Kip92, Kk04, LYYC14, M000, MS94, MRK+97, Ost99, OD+09, P002, RM03, SLD+13, TZZ09, TTHB06, WAF00, ZW03].
TACCLE [CTC01]. Tactics [YBZK21]. Tagger [WYMW20]. tailoring [CF10].
Taming [SB+21]. Target [KMYK19].
Task [DBNG15, BBS16, D197, ZSHD20, SCK13].
tasking [Dil93]. Tasks [FUG14]. Teams [CFL+16]. Technical [GXG21, GLL+21, RXX+19, UKR21].
technique [KJLS02, RH97, S06, SB02].
Techniques [Bj19, RD15, BR01, GHK+01, SM12].
technology [EAS08]. telecom [MC08].
telecommunication [Zav04]. Templates [CWM+20]. Temporal [CY11, P002, LYYC14, PMS13]. Term [VKV03]. Termination [TAA+19, Dil97].
Terms [WB13]. Test [Arc19, AG20, CMM+15, DPT13, EM15, FA14, FSM+15, GR+16, GGZ+15, GSYT21, HZZ+14, HLL+20, HAB+20, IC14, KB07, MPT+21, MKW15, MGTR18, SYA21, SMBO21, SSB20, XL20, ZAZ22, ZCH22, Ber94, BRR01, DO93, FK96, FRB+06, GHK+01, HGS93, HAB13, Hie02, Hie09, KSD08, Mem08, PWX14, Pet97, RH97, REM+04, SS06, UFG14, XM07]. Test-and-adapt [DPT13]. Test-Equivalence [MGTR18].
test-selection [BR01]. Test-suite [XL20]. Testability [AG22, BHL11, MB09].
Testers [FSM+15]. Testing [DBNG15, AG22, B96, B618, CWW+20, DPB17, GGGU21, He14, KPC18, MJ+0, MB20, NL11, PGZ+30, TCDZ19, TAA+19, WPB19, ZSHD20, Ber94, CTCC98, CTC01, CM08, DR96, DF94, DSV03, FRB+06, Ham09, HAB13, Hie09, JW94, KSD08, Kip92, Kuh99, LY05, MRP+13, MB09, Mem08, MS03, NP08, OF19, OSH04, Pet97, RBL+01, REM+04, SS06, SM12, TM14, TK02, Wey96, XM08, ZAW92].
testing-based [Ham09]. Tests [GWD+21, PKH22, SPK14, ZE14]. Text [MBH+17]. Their [WB13, MPG+13].
theoretic [YHC13]. Theoretical [SZH+19, YXX+17, XCKK13]. Theory [FS+13, RGCS14, WFF+19, HBB+09, Ham09, PPP94]. Things [YBZK21]. Three [BM07, ZMM+16, CSC06]. time [Bro93, Cal95, FM94, FP02, GGLT07, MS94, MKR+97, Ost99, P002, SLD+13, WME93, ZHZ+21].
time-critical [MS94].
time-sensitive [Bro93, Cal95]. Timed [BMM+17, PBCT10, SLD+13]. Timeliness [WPB19]. Titles [GXX+20]. TLS [TCDZ19]. TLTL [BLS11]. Tool [dFLSV14, CSX08, ELN+92, MS03, MPF14, YTL+95, ZW95].
tools [FS+13, Ham09, DR96, Tiw08]. topics [BGO+14]. Topology [Rob08]. TOTA
[MZ09]. Trace [MWP+21, HZZ13].

Trace-Based [MWP+21]. Traceability [BFN+14, DFO70]. Traces [MWP+21].

tracking [DER10]. Trading [HE13]. Trait [PSZ21]. Transactional [MWP+21].

Transactions [ZOJH21]. Transformation [Rus21, BHL11, CF303, MBH09].

Transformations [ASJDW21, AG22, BS16, DGD+19, NBMK22, TSPRC18, YHR92].

Transforming [MHK11, BHL11].


Type [ARL+15, KATS12, ODE21, SGD15, BGL00, TD01]. Type-Based [ARL+15, SGD15]. type-specific [BGL00].

Types [ASJDW21, SPAK10]. typestate [FYM+08]. Typing [DG17, DGD+19].


Uncertainty-wise [ZZY+21]. Understand [GL11, AAG95]. Understandable [CZ19].

Understanding [ASMP16, DLRA15, DDKD21, LTX19, NBW+18, PSMV98].

Unified [HZZ+14, ZS97, MRRR02]. Unifying [CST16, RS09]. Unit [FA14, FSM+15, KSD08, MJS+21, SPK14].


usages [MPG+13]. Use [CDKP21, DGC14, SCK13, YBL15, DJ97, HBB+09, YBL13].

Used [CWM+20]. User [CCH+21, BRRP05, LASL13, SMT92].

Using [AGRR19, BBS16, CBRO16, CWH+21, CFM00, Cor00, EM15, FA14, GSYT21, HLL+16, HAB+20, KMYK19, MVM07, MGP+13, MKS+15, NBMK22, OKS+16, SYA21, Wey96, XM08, XMA+14, CK99, DFO07, DFG00, IY000, KK04, LS13, LH08, ML00, PGM12, SL+13, TC20, UKM04, XR13, ZW95]. utility [CSC06].

Validate [ZE14]. Validating [FM94, MSW12]. Validation [CRST12, FDC+21, QT12, TC019, CW99, DBGU13].

value [FBC+13, Hie06]. valued [CDEG03]. Variability [AMS+18, VLI+18].


Verification [ASJDW21, AGRR19, BCGB21, BMM+17, BLS11, CSV13, CH21, EWS14, FDC+21, GXSC21, HGW+16, NBB15, QT12, BGL00, CDMS10, CY11, DSV03, FGL+12, FGMP03, FYM+08, FC00, MPF14, SGE00, WME93].

verify [SMAC08]. Verifying [CJM00, GZSW19, DCCN04, SLDV98].

Version [ARG17]. versioning [ZS97].

Versions [VCF21]. via [BGO+14, FCLL21, GWD+21, GXLG21, KAS20, PXW14, SMY19, TWB+19, WCB+20, ZAW92, ZSW+22]. Views [DL13, Jac95b]. violation [LYY14].

Violations [MWP+21, MM13]. Virtual [BFFG19, DHW98, Poon02]. visual [CDP04, Dil93, KSD08, MG00].


warehouses [BCC+01]. way [RKBL19].

Weak [FDB+12]. web
REFERENCES


[ACF97] Vincenzo Ambriola, Reidar Conrad, and Alfonso Fuggetta. Assessing process-centered soft-


REFERENCES


[AMS*18] Iago Abal, Jean Melo, Stefan Stanciulescu, Claus Brabrand, Márcio Ribeiro, and Andrzej Wasowski. Variability bugs in highly configurable systems: a qualitative analysis. ACM Transactions on Software Engineering and Methodology, 26(3): 10:1–10:??, January 2018. CODEN ATSMER. ISSN 1049-
REFERENCES

331X (print), 1557-7392 (electronic).


**Basili:1992:RAC**


**Bonifati:2001:DDM**


**Bernardo:2002:AFS**


**Bagnara:2006:PMW**


**Brambilla:2006:PMW**


**Barrett:1996:FEB**

REFERENCES


[BG98] Robert W. Bowdidge and


REFERENCES

1049-331X (print), 1557-7392 (electronic).

**Binkley:2011:FTT**


**Binkley:1995:PIL**


**Batory:2002:AET**


**Bjorner:2019:DAD**


**Bogart:2021:WHM**


**Broy:2007:FMS**


REFERENCES


REFERENCES

Beauvais:2001:MSA


Broy:1993:FST


Bible:2001:CSC


Berstel:2005:SFM


Basu:2007:MCJ


Baki:2016:MSL


Ivan Candela, Gabriele Bavota, Barbara Russo, and Rocco Oliveto. Using cohesion and coupling for software remodu-

Chen:2021:HSI


Chen:2021:EPS


Chen:2020:WBU


Crow:1998:FSS


Chechik:2003:MVS

[CDEG03] Marsha Chechik, Benet Devereux, Steve Easterbro, and
REFERENCES


Costagliola:2004:FMI


Cugola:1996:FFI

Cugola:1996:FFI


Chatterjee:2021:AIQ


Chen:2010:VSI


Cohen:2003:AHQ


Conboy:2010:MDC

Kieran Conboy and Brian Fitzgerald. Method and developer characteristics for effective...


[CJ00] E. M. Clarke, S. Jha, and W. Marrero. Verifying se-
Cheung:1996:CCC


Cheung:1999:CSP


Cheon:1994:LSI


Chen:2018:FF


Chen:2008:UBS

Tsong Yueh Chen and Robert Merkel. An upper bound on software testing effectiveness. ACM Transactions on Software Engineering and Methodology, 17(3):16:1–16:??, June 2008. CODEN ATSMER. ISSN


REFERENCES

Chondamrongkul:2021:SAM


Csallner:2008:DCH


Castro:2021:FFS


Chen:2001:TMO


Chen:1998:BWI


Cook:1998:DMS

REFERENCES


Cook:1999:SPV


CWH+21


CXH+21

REFERENCES


REFERENCES


REFERENCES


[Damiani:1999:CHA]


[Damiani:1999:HAA]

Durante:2000:CAC


[DFG00]

deFrancesco:2014:GTE


[FLSV14]

DeLucia:2007:RTL

Andrea De Lucia, Fausto Fasano, Rocco Oliveto, and Genoveffa Tortora. Recovering traceability links in software artifact management systems using information retrieval methods. ACM Transactions on Soft-


REFERENCES


REFERENCES


Wolfgang Emmerich, Mikio Aoyama, and Joe Sventek. The

**ElK holy:2014:CCR**


**Erwig:2005:SRS**


**Egyed:2002:AAC**


**Ehsan:2021:ESD**


**El-Hokayem:2020:MDS**


**Ebnenasir:2011:FSD**


**Ellis:2019:RFD**

[EKL+19] Samuel J. Ellis, Titus H. Klinge, James I. Lathrop, Jack H. Lutz,

Engels:1992:BIS


Estublier:2005:ISE


Emam:2015:TCP


Emam:2018:IEP


Eshuis:2006:SMC


Erwig:2011:CCR

REFERENCES

Eldib:2014:FVS


Falessi:2013:VDR


Fraser:2014:LSE


Fong:2000:PLM


Fu:2021:SSC

REFERENCES


REFERENCES


[Felder:1994:VRT]

[Fritz:2014:DKM]

[Feldt:2003:FSA]

[ Forgacs:1994:DIF]

[Felder:2002:FDN]

[Frias:2005:RAS]
Marcelo F. Frias, Carlos G. López Pombo, Gabriel A. Baum, Nazareno M. Aguirre, and Thomas S. E. Maibaum. Reasoning about static and dynamic properties in alloy:
REFERENCES


[Fink:2008:ETV] Stephen J. Fink, Eran Yahav, Nurit Dor, G. Ramalingam, and Emmanuel Geay. Effective type-state verification in the presence of aliasing. *ACM Trans-

Gencel:2008:FSM


Godo:2021:EBT


Gamatie:2007:PDE


Gligoric:2015:GCB


Ghezzi:2005:E


Ghezzi:2007:E


Graves:2001:ESR

Garcia:2018:LOR


Gruschke:2008:ROF


Ganesan:2014:AED


Gandhi:2011:DMC


Graziotin:2022:PBS


Guo:2021:HFW


REFERENCES


REFERENCES

Gao:2021:HAF

Gao:2019:VQS

Hemmati:2013:ASM

Holmes:2020:URL
REFERENCES


REFERENCES

He:2016:LWA


[HH95]


Hierons:2006:ACC


Hierons:2009:VFT


Hierons:2014:CCD


Heitmeyer:1996:ACC


Harman:2015:ISI


Henkel:2008:DAA


Hunt:1998:ADA


Holmes:2012:SPS

[HW12] Reid Holmes and Robert J. Walker. Systematizing pragmatic software reuse. *ACM
REFERENCES


Tracy Hall, Min Zhang, David Bowes, and Yi Sun. Some code smells have a significant but small effect on faults. *ACM Transactions on Software Engineering and Methodology*, 23(4):33:1–33:??, August 2014. CODEN ATSMER. ISSN 1049-331X (print), 1557-7392 (electronic).


Jackson:2002:ALO

Jezequel:1999:RVC

Jennings:2012:TPA

Jalote:2008:PRR
Pankaj Jalote, Brendan Murphy, and Vibhu Saujanya

**Jin:2015:ASR**


**Jacceri:1998:ESP**


**Jeng:1994:SDT**


**Jiang:2019:RNF**


**Jiang:2019:IMA**


**Kafali:2020:DSS**

Özgür Kafali, Nirav Ajmeri, and...


REFERENCES

Kiper:1992:STR


Kaiser:1993:PDI


Kramer:2004:CCM


Klin:1993:MEG


Keidar:2002:IBT


Kang:2021:ASM


KKL02


KLS02


Keidar:2002:IBT
Klint:2005:TED


Ko:2010:EAW


Kim:2019:PLR


Kuchta:2018:SSE


Kapur:2020:DES


Karam:2008:ULT


Kuhn:1999:FCE

REFERENCES


[LDUD13] Lizcano:2013:WCA


[LCZL14] Liang:2002:EAA

[Lhotak:2008:EBC] Ondrej Lhoták and Laurie Hendren. Evaluating the bene-
Lu:2021:ECR


Louridas:2000:GMR


Lyu:2021:ESI


Lu:2014:RBS

Li:2014:RIP


Lyu:2022:TCI


Le:2013:MDF


Louridas:2008:PLS

[LSV08] Panagiotis Louridas, Diomidis Spinellis, and Vasileios Vlachos.


Linares-Vasquez:2018:MOO


Lopes:2003:HOA

Liu:2022:CSC

Masri:2014:PCC

Lau:2005:EFC

Meyers:2007:ESS

Liu:2014:DWN
Xiao Liu, Yun Yang, Dong Yuan, and Jinjun Chen. Do we need to handle every temporal violation in scientific workflow systems? *ACM Transactions on Software Engineering and Methodology*, 23(1):5:1–5:??, February 2014. CODEN ATSMER. ISSN 1049-331X (print), 1557-7392 (electronic).

Mahmoud:2015:ESR

Miranda:2020:TRU
ATSMER. ISSN 1049-331X (print), 1557-7392 (electronic).


McMinn:2009:EEN


Mills:2017:PQQ


Mohagheghi:2008:EIS


Memon:2008:ARE


Mockus:2002:TCS


Mattsson:2012:AMA


Mills:2000:KBM

Kevin L. Mills and Hassan Gomaa. A knowledge-based method for inferring semantic concepts from visual models of system behavior. *ACM Transactions on Software Engineering


REFERENCES

myers/p410-myers.pdf; http://www.acm.org/pubs/citations/journals/tosem/2000-9-4/p410-
myers/.


[MMP09] Wes Masri and Andy Podgurski. Measuring the strength of information flows in programs. *ACM Transactions on Software Engi-

Murphy:2014:ISI


Moscato:2014:DTV


Mcmillan:2013:PSR


Ma:2021:TSD

REFERENCES


REFERENCES

Miller:2003:FTS


Moller:2014:ADC


Muralkannaiah:2015:P


Meneely:2012:VSM


Maalej:2014:CPC


Minsky:2000:LGI


Marin:2007:ICC

Marius Marin, Arie Van Deursen, and Leon Mooney. Identify-

**Mcminn:2015:ETC**


**Ma:2021:R**


**Minku:2013:SEE**


**Nikanjam:2022:AFD**

REFERENCES

Nentwich:2003:FCC


Nguyen:2014:DDI


Nie:2011:MFC


Naish:2011:MSB


Notkin:2007:Ea


Notkin:2007:Eb


Notkin:2007:Ec


Notkin:2008:Ed

REFERENCES


Ouyang:2009:BPM


Offutt:1992:IST


Osterweil:2005:E


Ostertag:1992:CSR


Ouni:2016:MCC


Offutt:1996:EDS


[POB07] Richard F. Paige, Phillip J. Brooke, and Jonathan S. Ostroff. Metamodel-based model conformance and multiview consistency checking. *ACM Trans-

Pavese:2016:LME


Pezze:2019:Ea


Pezze:2019:Eb


Pezze:2019:Ec


Pezze:2019:EIE


Pezze:2020:Ea


Petrenko:1997:CR


Pezze:2019:Ea

(print), 1557-7392 (electronic).


REFERENCES


Podgurski:1999:ESR


Pradella:2013:BSC


Pons:2002:TAC


Podgurski:1993:RRS


Parisi-Presicce:1994:ATC


Picco:2001:RAC

Gian Pietro Picco, Gruia-
REFERENCES


Polyvyanyy:2017:IDP


Pohl:1999:PTP


Pan:2014:GTG


Qi:2013:PEB


Pantiuchina:2020:WDR

Qi:2012:DAD


Queralt:2012:VVU


Rothermel:2001:MTS


Rothermel:2004:TSC


Radoi:2015:ETS


Reiss:1999:DE


Rigby:2014:PRO

Peter C. Rigby, Daniel M. German, Laura Cowen, and
REFERENCES


**Roychoudhury:2012:SMS**


**Rothermel:1997:SER**


**Reuling:2019:AWP**


**Robillard:2003:SAS**


**Robillard:2007:RCS**


**Roman:1997:MUR**

REFERENCES


Riesco:2018:PII


Robillard:2008:TAS


Rosenblum:2013:ELF


Rosenblum:2013:MDN


Rosenblum:2014:Ea


Rosenblum:2014:Eb


Rosenblum:2014:E


Rosenblum:2016:E

REFERENCES

2016. CODEN ATSMER. ISSN 1049-331X (print), 1557-7392 (electronic).


Ryder:2005:ISE


Ricca:2014:AES


Russo:2021:ASM


Roshandel:2004:MSM


Razzaq:2019:SEE


Ren:2019:NNB


Stol:2014:KFA

[SAB+14] Klaas-Jan Stol, Paris Avgeriou, Muhammad Ali Babar, Yan Lucas, and Brian Fitzger-


[SFA18] Klaas-Jan Stol and Brian Fitzgerald. The ABC of soft-

**Sherman:2015:DTB**


**Sistla:2000:SSB**


**Scanniello:2014:IUA**


**Sundelin:2022:TAS**


**Shonle:2012:FCR**


**Sullivan:2010:MAO**

Kevin Sullivan, William G. Griswold, Hridesh Rajan, Yuanfang Cai, Macneil Shonle, and Nishit Tewari. Modular aspect-oriented design
REFERENCES


[Sahin:2014:CSD] Dilan Sahin, Marouane Kessen-
REFERENCES


Song:2019:SEI


Sullivan:1992:REI


Sne96


Sarro:2018:LPB


Steimann:2010:TMI


Siegmund:2021:MOV

Janet Siegmund, Norman Peitek, Sven Apel, and Norbert Sieg-

**Santhiar:2014:MUT**


**Sommerville:2005:ESI**


**Snelting:2006:EPC**


**Sinha:2006:HMB**


**Scanniello:2017:FFC**


**Schreif:2002:BCS**


**Soltana:2020:PCS**

Ghanem Soltana, Mehrdad Sabetzadeh, and Lionel C.


[TDDEO19] Porfirio Tramontana, Domenico Amalfitano, Nicola Amatucci, Atif Memon, and Anna Rita Fasolino. Developing and evaluat-

Tichy:1995:AR


Trammell:1992:APC


Taymouri:2020:CAW


Tian:2019:DTC


Tip:2001:SBA

Tilevich:2011:EEP


Thiran:2006:WBE


Tiwana:2008:ICD


Tsuchiya:2002:FCE


Tappenden:2014:ACC


Tateishi:2013:PIS


Tilevich:2009:JOE

Troya:2018:SBF


Tao:2021:SDM


Tufano:2019:ESL


Tyszberowicz:1992:OPL


Tan:2009:CDM


Unterkalmsteiner:2014:TRE

Uchitel:2004:IES


Uddin:2021:AAU


Vidal:2018:ARB


Vandehei:2021:LDL


Vouillon:2013:SCC


vandenBrand:1996:GFC


Vogel-Heuser:2022:MIA

Birgit Vogel-Heuser, Eva-Maria

**VanDenBrand:2003:TRT**


**VonRhein:2018:VAS**


**Venkatasubramanian:2004:FMR**


**Wallach:2000:SSM**


**Walkinshaw:2013:ACS**


**Wang:2020:KDI**

Guanhua Wang, Sudipta Chattopadhyay, Arnob Kumar Biswas, Tulika Mitra, and Abhik Roychoudhury. KLEESpectre: Detecting information

**Wu:2021:WAA**


**Weyuker:1996:UFC**


**Wagner:2019:SQR**


**Wang:2020:UED**

REFERENCES


REFERENCES

107


Hui Xu, Zhuangbin Chen, Mingshen Sun, Yangfan Zhou, and Michael R. Lyu. Memory-safety challenge considered solved? an in-depth study with all Rust CVEs. *ACM Transactions on Software Engineer-
REFERENCES


Yu:2020:SCR


Yuan:2020:TBE


Yue:2013:FTU


Yue:2015:AAF


Yanez:2021:AIT


Yoo:2013:FLP


Yang:1992:PIA

REFERENCES

Yan:2020:AGS


[Young:1995:CAT]


[Young:2016:HPP]


[Yo:2017:HCG]

Shin Yoo, Xiaoyuan Xie, Fei-Ching Kuo, Tsong Yueh Chen, and Mark Harman. Human competitiveness of genetic programming in spectrum-based fault localisation: Theoretical and empirical analysis. *ACM
Zhang:2022:AHS

Zave:2004:ATT

Zeil:1992:DLE

Zhu:2013:ADP

Zhou:2022:PTP

Zheng:2018:MAI
Zhang:2014:TV


Zhang:2018:ESM


Zhao:2021:PPA


Zav:1993:CC


Zav:1997:FD


Zambonelli:2003:DMS

REFERENCES

331X (print), 1557-7392 (electronic).

Zheng:2013:PRP


Zhao:2021:ISD


Zhou:2016:IRO


Zarir:2021:DCE


Zeller:1997:UVT


Zhang:2020:MTC

REFERENCES

Zhang:2013:CDC

Zhou:2022:SAI

Zaremski:1995:SMT

Zaremski:1997:SMS

Zhang:2021:CSO

Zou:2021:IAM
Deqing Zou, Yueming Wu, Siru Yang, Anki Chauhan, Wei Yang, Jiangying Zhong, Shihan Dou, and Hai Jin. IntDroid: Android malware de-

**Zhou:2014:DSP**


**Zhou:2018:HFW**


**Zhao:2006:STS**


**Zou:2021:IDL**


**Zhang:2021:UWR**