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**Title word cross-reference**

- $N$ [RKBL19], $z$ [LCZL14].
- -Equivalent [LCZL14], -way [RKBL19].
- 19 [FSZ+22].
- 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], **Academia** [MS22].  
**Acceleration** [LHX21], **access** [BDL06].  
**Accessibility** [BXL+22], **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** [KS22, Esh06].  
**Activity-Based** [KS22], **activitycharts** [BRG+01], **Ada** [Dil93, Dil97, DBDS94, YTL+95].  
**ADAM** [GL14], **adapt** [DPT13], **Adaptation** [SEM17].  
**Adaptive** [BS16, CLBY18, DR11, RPT+22, SMBO21, ZA22, HWH14, VTA04].  
**Addendum** [HT98], **Address** [Zav04].  
**Addresses** [ZWGX22], **Adequacy** [GRS+16, KSD08].  
**Adequate** [GGZ+15].
Admitted \textsuperscript{RXX+19, GLL+21}, adopting \textsuperscript{SAB+14}. Adversarial \textsuperscript{KL21, ZSZ+22}. Affected \textsuperscript{VCF21}, against \textsuperscript{EWS14, IC14}. agents \textsuperscript{MPR06}. Aggregation \textsuperscript{SPAS21}. aggregator \textsuperscript{BPT10}. Agile \textsuperscript{Rus21, CF10}. AI \textsuperscript{MFBB+22, OHDB92}. AI-based \textsuperscript{OHDB92, MFBB+22}. aided \textsuperscript{SB06}. AIOps \textsuperscript{LJL+20, LLS+21, LRL+22}. algebra \textsuperscript{ZB13}. Algebraic \textsuperscript{SZH+19, HRD08, PPP94}. algebras \textsuperscript{BCD02}. algorithm \textsuperscript{BS07, YHR92}. Algorithms \textsuperscript{DBNG15, ARL+15, HT17, HT98, HT98, VCF21}. aliasing \textsuperscript{FYD+08}. alignment \textsuperscript{UFG14}. Alignments \textsuperscript{TC20}. Allocation \textsuperscript{SMBO21}. alloy \textsuperscript{FPB+05, MFH14}. alone \textsuperscript{UGKR22}. Alphabet \textsuperscript{FDB+12}. Alternative \textsuperscript{TTL+21}. Alternatives \textsuperscript{KDM17}. Amoeba \textsuperscript{DCS09}. among \textsuperscript{GL11}. Amplifying \textsuperscript{ZB13}. Analyses \textsuperscript{KATS12}. annotation \textsuperscript{KATS12}. annotation-based \textsuperscript{KATS12}. Annotations \textsuperscript{IC14, ODE21}. announcement \textsuperscript{SPAK10}. Anomalies \textsuperscript{ZH+21}. Ansible \textsuperscript{RRPW21}. Answer \textsuperscript{GXLG21}. answering \textsuperscript{KM10}. Anti \textsuperscript{MS22}. Anti-patterns \textsuperscript{MS22}. Apache \textsuperscript{FAP22, MFH02}. API \textsuperscript{Arc19, ARG17, ZST19, ZWS+21}. APIs \textsuperscript{AG22, MZA22, SPK14, ZA22}. App \textsuperscript{Cai20, CCH+21, GZZ+22, JZL+21, NPB22, WCO+21}. APPL \textsuperscript{SHO95}. APPL/A \textsuperscript{SHO95}. Applicable \textsuperscript{VHNF22}. Application \textsuperscript{DBDS94, MFL12, MS15, ZE14, LH02}. Applications \textsuperscript{CGPP15, DG17, ETM22, GTD21, KAT12, MBH+17, NBB15, ZOJH21, BM07, BCFM06, CPPRM03, CDP04, GGLT07, MZ09, MGMM11, PWX14, PBCT10, SS06, WCGD07, XM07}. Applying \textsuperscript{FLM+98, FTF22}. Approach \textsuperscript{ASNB19, BCGB21, BZSW14, BMM+17, BSA22, CCH+21, CSL21, D11, FDC+21, GXC21, HZZ+14, HBB22, MFLL12, LDUD13, SMBO21, TCD219, YBB20, YBL13, ZSL+13, CTCC98, CRST12, CPPRM03, DBFB9a, DFBB9b, DvdHT05, DPT13, DF94, FK96, FPB+05, Hen97, LASL13, MZ09, OHDB92, QRLV12, TD01, ZSL+06}. Approaches \textsuperscript{ABC+22, XL20, YH13}. approximation \textsuperscript{JGB12}. Apps \textsuperscript{CCH+21, LVBBC+18, RMCT22, SLB+21, ZSL+22}. APTL \textsuperscript{WME93}. Architecting \textsuperscript{BCD02, YBZK21}. Architectural \textsuperscript{CSW21, MFL12, AG97, AG98, LWF03, RVMR04}. Architecture \textsuperscript{AMGBK22, BBN14, HWH14, SBBK22, ZCT18, AAG95, BCC92, DvdHT05, GL14}. Architecture-centric \textsuperscript{HWH14}. Architecture-Implementation \textsuperscript{ZCT18}. Architecture-Level \textsuperscript{BNB14}. Architectures \textsuperscript{SBMK21, MRRR02}. Aria \textsuperscript{DRW96}. Arithmetic \textsuperscript{GXC21}. Array \textsuperscript{NKWF14}. artifact \textsuperscript{DFOT07}. ASM \textsuperscript{BZSW14}. Aspect \textsuperscript{Jac95a, DR10, HE13, KF07, RS09, SGR+10}. aspect- \textsuperscript{RS09}. aspect-oriented \textsuperscript{DR10, HE13, SGR+10}. AspectJ \textsuperscript{HZS08, MHK11}. Aspects
Assembly [AM04]. Assessing [ACF97, Cai02, RST+14, VBZ+18, YHL+22].
Assessment [CM+15, LWMM22, GJ08, PJRR10, SR05, Wey96]. assigned [BHL11].
Assignments [AFY+22]. assistance [GN93]. assume [CAC08].
assume-guarantee [CAC08].
Assumptions [HGW+16, IWY00].
ASTOOT [DF94]. Atomic [Lin22].
Atomicity [MWP+21]. aToucan [YBL15].
Attack [WWZ+22]
attacks [KK93]. attributes [GL14].
Augmenting [DPB17, GCX+22]. Author [Ano96, TAW95]. Autoencoder [CCX+20].
Automated [Arc19, AG20, ASNB19, CSW21, Eg02, FA14, FSM+15, GMN03, HJIL96, HAB+20, HCW+22, JO15, LKRF22, DGD+19, MZA22, MS14, NPB22, PGZ+20, RKL19, STGR21, TM14, WB13, YBL15, ZSL+22, ZSW+22, BGO+14, CS12, CAC08, FN03, FRB+06, TBS92, XM07, XM08].
Automatic [CGPP15, CF03, DSV03, MGTR18, NBMK22, UKR21, BRKP05, DO93].
Automatically [CM+15, CDKP21, Mem08, YJW+20, LS13].
Automating [GZX+22].
Automaton [EM18].
Autonomous [FDC+21].
Avoiding [Hie06].
Aware [HGC+22, KAT12, LWMM22, MS15, VLI+18, WYW+22, CYA22, DFB99a, DFB99b, MGMM11, WYM20, WX+21].
B [SB06]. back [Not13].
Based [AB12, AR+15, ASMP16, AFHC22, BMM+17, CLL+22, DDE11, GZX+22, GGZ+15, JZL+19b, KS22, LXL+22, LHX21, MWP+21, MFMB+22, OKS+16, SMBO21, SGD15, TLP+22, TSPRC18, WB13, YXK+17, ZAA22, ZLW+21, ZYW+21, AAP+20, AG22, ABC+22, BGDv92, BCTW96, BT22, CMP13, CDSM10, CY11, CCX+20, Cia93, CMCP+99, CPPRM03, CW98, CZ19, DBGU13, DBPU13, GGGM21, Ham09, HAB13, KATS12, KKL02, KK+22, Kip92, KK04, Kuh09, LY05, LH08, MMST14, Mem08, MB07, MS03, MG00, MPF14, NLR11, OPK+21, PBO07, PZS+20, QNR13, RXX+19, RKB19, SS06, SG0900, SB02, Sne96, TZZ09, TPT13, THBB06, TD01, TK02, UKM04, WAFO0, WLX+21, XM07, XCKX13, XL20, YHC13, ZZZ+21, OHDB92].
Baseline [SP18, WOM15]. basis [AG97, AG98].
Bayesian [FTF22, PLM15, SMY19].
BDD [HGW+16]. BDD-based [HN08].
Behavior [FDB+12, DDGR18, MAK22, SS02, DBGU13, KL14, MG00, PP93, UKM04].
Behavior-consistent [SS02]. Behavioral [CZ19, GLFW+22]. behaviors [IWY00].
benefits [HN08, MC08]. Better [HNW+22].
between [Gun00].
Beyond [GWD+21].
Bilevel [SKBD14].
Binaries [JPS22].
BIP [ABB+18].
BiRD [JPS22].
Black [PGZ+20, RMCT22, CTCC98].
Black-box [PGZ+20, RMCT22].
Bloat [NBW+18, XMA+14].
Blockchain-Driven [AMGK22, YBZK21, ZOJH21].
Blockchain-Powered [ZODJH21].
Boa [DNRN15].
Boolean [CCX11, KB07].
Boosting [CS22, GXLG21].
Bootstrap [SMY19]. bound [CM08].
Boundaries [CSV13].
boundary [Hie06].
Bounded [PMS13].
box [PGZ+20, RMCT22].
Brain [VBZ+18].
Breaking [BHKT21, CAC08].
Brutus [CJM00].
Buddy [ZWGX22].
Budget [SMBO21].
Bug [AHFC22, LRC14, TWB+19, ZSL+22, AM11, CSX08].
Bug-Fixing [TWB+19].
Bugs [AMS+18, ZSL+13, Jac95a].
Building [ELN+92, WWZ+22, KKL02].
Business [LDUD13, DC09, ODV+09].
C [BCGB21, CWM+20, DLRA15, SRTR17].
C/C [BCGB21, DLRA15].
Cache
Cross [LLZ+22, ZYL+18, DCS09].
Cross-Language [LLZ+22].
cross-organizational [DCS09].
Cross-Project [ZYL+18], crosscutting [SGL12, MVMT07].
Crowdtesting [WYMW20].
Crowdworker [WYW+22].
Crucial [BPSSA+22].
cryptographic [DFG00].
Customize [KAT12].
Custom [SLD+13].
customizable [Dev99].
CVEs [XCS+22].
Cyber [CYA22].
Cyber-physical [CYA22].
Cycle [VCF21].
Cycles [OLL22, SSO2].

Dahl [Ano02], dark [ZJ97].
DARWIN [QRLV12].
Data [BHB16, CYA22, CCY+21, DPB17, FTF22, GSYT21, HGC+22, KDM17, LLS+21, NBB15, SSBB20, TTL+21, BCC+01, BG98, CW98, FK96, For94, OSH04, TZZ09, WGC11].
Data-Intensive [NWB+18].
Database [MKW15, CF03, PWX14, WGS07].
Databases [AG20].
dataflow [KSD08].
Dataset [YHL+22].
Datasets [UGKR22].

Date [OLL22].
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, JO15, MQLR16, AM04, HRD08, OSH04, QRLV12].
Decentralized [EKF20, ML00].
Deciding [SGD15].
Decision [HGW+16, XW+22].
Decisions [AMGBK22, LLS+21, AM11].
Decomposition [BSA22].
decoupling [BTI14].
deduction [FS93].
deductive [GM01].

Deep [CYA22, CVW+20, CW+21, HGC+22, LLSM22, LGX+22, MPT+21, NBMK22, RMCT22, WXL+21, WCP+22, XWL+22, YHL+22, ZFL+22, ZS+22, ZZZ+21].

DeepWukong [CW+21].
Defect [FAP22, KS20, NXL+22, ZYL+18, SM12].
Defective [VCF21].

Degree [FMMH+14].
Degree-of-knowledge [FMMH+14].

Delta [HT98, HVT98].

Denoising [BXX+20].

Dependence [FCLL21, PJX17, Di97, SHR01, SRK06].

dependences [Jac95a, OSH04].

dependencies [BGO+14, Gum00, Rob08].

Dependency [SEM17, CY11, GL14].

dependency-based [CY11].

dependency-driven [GL14].

Deploy [AVY11].

Depth [XCS+22, ZLC14].

Derive [YBL15, XM08].
derived [WY00].

Description [Bjo19, DvdHT05, DJ97].

Descriptions [GCX+22, JZL+19a, AAG95, BAD08, WJ10].
descriptors [DER10].

DESEN [KAS20].

Desert [Rei99].

Design [AROK21, AMGBK22, BPT10, CCX+20, EK11, Liu22, DDGR18, MFL12, SGR+15, BM07, BO92, BRRP05, BFN+14, CSC06, CR94, FBC+13, FP02, GGLT07, LL00, MRK+97, RS09, SS06, SBO6, SGR+10, YTL+95, Z1B3].

Design-Pattern [SGR+15].

Designers [CZ19].

Designing [BCC+01, DL11, XM07, CPPRM03].
designs [SB02].

Destruct [XLG22].

Detecting [AVY11, CVW+21, GCX+22, DDGR18, MM13, WCB+20, YHL+22, ZSL+13, Jac95a, LS13].

Detection [Cai20, CL22, CCY+21, EKL+19, GHM18, JPS22, LRC14, MNB+22, MS14, NBMK22, RD15, RXX+19, SKBD14, UGKR22, WWZ+22, XMA+14, ZAW92, ZFL+22, ZWL+21, ZYW+21, FN03, Kuh99, SMT92, TK02, XR13].

Detector [ZZX+21].
determination [OLR+96].
deterministic [HT17].

Developer [BFFG19, CDKP21, CCY+21, EHEZ21, KS22, SHLW21, WFW+20, CF0, FMMH+14, Sin10].

Developers [FS+22, PZS+20, PLZ+22, YZP+22, ZWCH21].

Developing [HRD08, TAA+19, ZZJW03, ZOZH21, MGMM11].

Development [BFFG19, BSA22, CFL+16, GTD21, LKRF22, LCS+22, MNB+22, MS15, ZCT18, AM11, DvdHT05, EAS08, ELN+92, GJ08].
KK93, MFH02, PSV01, SCK13, Tiw08].
development-oriented [AM11].
deviations [CDFG96]. diagnosis [NLR11].
diagram [BP05]. diagrams [BM13, Egy02, Esh06, LK14]. DiaPro
Digraphs [EM15]. Dijkstra [Ano02].
Directed [YPRK14]. discipline [KLV05].
Discovering [CW98, GL11]. Discovery
[Böh18, SPK14, GL14]. discrete [Ost99].
Discussions [EHEZ21]. Distinguishing
[HT17]. Distributed
[BLX+20, DD122, FCLL21, GTD21, Hie14, TGI11, WMF93, KK93, MU00].
Distribution [HGC+22, TS09].
Distribution-Aware [HGC+22].
Diversifying [MJS+21]. diversity [HAB13].
Do [CMM+15, CXLG22, JA22, LYYC14, PLZ+22, SURL11, YZP+22, CAC08].
Documentation [HCW+22, UKR21, TBS92]. Documenting
[SGR+15]. documents [SMT92]. Does
[CXH18, FSN+15]. Domain
[ASNB19, BJ19, HZS08, ZE14, BJMH02, BAD08, Hie09, JW94, SS06, ZAW92].
Domain-specific [HZS08, BJMH02, SS06].
domain-testing [JW94]. domains [Hie02].
Dormant [FAP22]. Double [For94].
Driven [CLBY18, DG17, PVHW17, BDL06, GL14, GTD21, NPB22]. DSD
[CSX08].
DSD-Crasher [CSX08]. Duplicate
[WYMW20]. Duplication
[ZLW+21, DER10]. during [FSZ+22].
DynAlloy [FPGA07]. Dynamic
[CST16, FCLL21, HB22, KMKY19, DDGR18, NKWF14, PJL17, PSW+20, XMA+14, CY11, DR10, FC00, FPB+05, GSH97, PJRR10].
dynamically [WGS07]. Dynamics
[BSA22]. Dynamite [MPF14].

E3 [JPL98]. Eagle [LHX21]. Early
[KDM17]. Easier [CMM+15]. Easy
[ZWCH21]. Ecosystems [BKHT21]. Edit
[MNB+22]. editing [BGdV92]. Editor
[Pez19d, Ros19]. Editor-in-Chief
[Pez19d, Ros19]. Editorial [DR15, GMRS03, Ghe05, Ghe07, Not07a, Not07b, Not07c, Not08a, Not08b, Not09, Not10, Not12,
Not13, OGKW05, Pez19d, Pez19a, Pez19b, Pez19c, Pez20a, Pez20b, Pez21, Pez22,
Ros13a, Ros14c, Ros14a, Ros14b, Ros16, Ros17, Ros18a, Ros18b, Ros19]. Edsger
[Ano02]. Effect [GRS+16, HZBS14, RST+14, ZSL+13, Of792, Sin10, ZXLC14].
Effect-Oriented [ZSL+13]. Effective
[FYD+08, RD15, ZOJH21, CF10, FCLL21, Hen97, NPB22, REM+04]. Effectiveness
[CST16, CMM+15, GRS+16, MKW15, ODE21, UGKR22, CM08]. Efficiency
[CMM+15, LH02]. Efficient
[AGRR19, AVY11, CWW+20, FPGA07, SRK06, ZWGX22, dFLSV14, RH97].
Efficiently [DL11]. Effort
[KS22, SP18, SMY19, W015, AM11, BM07, GJ08, MY13]. elaboration
[UKM04]. Eliciting [JPL98]. Elite
[WFW+20]. Embedded
[BNB14, MFL12, GGLT07]. Embedding
[LWWM22]. Embeddings [ETM22].
Emergent [LBZ14]. Emoji [CCY+21].
Emoji-powered [CCY+21]. Emotion
[CCY+21]. Empirical [AROK21, AAP+20, CWM+20, EHEZ21, FSN+15, FTF22,
GLL+21, HGC+22, LLSM22, LL+21, MBH09, ODE21, RWEB19, TBW+19,
UGKR22, VLY+18, YXK+17, ZHO+18, BM07, BGH07, GHK+01, HT98, HT98,
MB07, MC08, MGNL98, SR05, Tiw08].
Emulation [DD122]. emulators [MPR+13].
enabled [VTA04]. Enabledness
[DBGU13, GGGU21]. Enabledness-based
[DBGU13, GGGU21]. End
[ZSL+22, Dev99, LASL13]. End-to-End
[ZSL+22]. end-user [LASL13]. Energy
[LVBBC+18]. Engineering
[AAP+20, CL22, DG17, DL11, DR15, FTF22,
GLF22, LGX+22, MFBF+22, MBH+17,
MP14, OKS\textsuperscript{+16}, STS\textsuperscript{+18}, SF18, UGKR22, WFR\textsuperscript{+19}, WCP\textsuperscript{+22}, XYL\textsuperscript{+22}, ACF97, CDP04, ELvdH\textsuperscript{+05}, KLv05, LASL13, RSB05, SR05, TBS92, UFG14, XL20, ZJ97, engineers [HBB\textsuperscript{+09}], engines [SURL11].

enhanced [SS06]. Enhancement [HGC\textsuperscript{+22}, ZFL\textsuperscript{+22}]. Enhancing [AG22, TS09]. Enough [CBRO16].

Ensemble [UGKR22]. Ensuring [SEM17].

equations [BRG\textsuperscript{+01}, KGA\textsuperscript{+12}].

environment [ATW04, Bre95, FGPM03, Kli93, MRK\textsuperscript{+97}, Rei99, RVMRM04, SN92, TY92].

equivalents [ACF97, DHW98, ELN\textsuperscript{+92}, KK93, Kli93, MGP\textsuperscript{+13}, PJRR10, PWD\textsuperscript{+99}].

error [Kuh99, TK02].

ESP [Cia93].

essential [ACF97, DHW98, ELN\textsuperscript{+92}, KK93, Kli93, MGP\textsuperscript{+13}, PJRR10, PWD\textsuperscript{+99}].

Equivalence [LH02, MGTR18, DSV03].

Equivalent [LCZL14]. Errata [AG98].

error [Kuh99, TK02]. errors [TD01, ZAW92].

Essential [SLB\textsuperscript{+21}]. estimates [GJO8]. Estimating [MB15, PBU16, BM07].

Estimation [CWW\textsuperscript{+20}, KS22, PMM\textsuperscript{+99}, SP18, WOM15, ZFL\textsuperscript{+22}, MY13, TZZ10].

Estimator [KS20].

Ethereum [CXLG22, WWZ\textsuperscript{+22}, ZOJH21].

evaluate [MGP\textsuperscript{+13}]. Evaluating [LH08, TAA\textsuperscript{+19}, WGG13].

Evaluation [AAP\textsuperscript{+20}, FA14, HCW\textsuperscript{+22}, KDM17, MS15, RWEB19, SMBK21, SMBK22, YHL\textsuperscript{+22}, ZWL\textsuperscript{+22}, CAC08, DBDS94, KK93, MBH09, XCKX13]. evaluations [SM12]. Event [ASMP16, BCTW96, CW98, DBPU13, Mem08]. Event-Based [ASMP16, BCTW96, CW98, DBPU13].

every [LYYC14]. Evolution [CAi20, DR11, DKD21, RM03, RVMRM04, SN92, THHB06, WGG13].

Evolutionary [HLL\textsuperscript{+16}, YB20, Hen07, MBH09].

evolvability [CS12]. evolving [DCS09, QRLV12].

EvoMaster [Arc19, ZA22].

evoSuite [FA14]. Exact [HKMB\textsuperscript{+14}]. Examination [ZYL\textsuperscript{+18}].

Examining [MAKMW22]. Example [LKRF22]. Examples [BS16]. Exception [CMP13, ZE14, RM03]. Executables [AEK\textsuperscript{+16}].

Execution [CPCT21, KPC18, TDT\textsuperscript{+22}, WCB\textsuperscript{+20}, YPRK14, AM04, Di93, DHW98, SMAC08].

Executions [BLX\textsuperscript{+20}, EM18, PSW\textsuperscript{+20}].

Existing [AG22]. experience [CMCP\textsuperscript{+99}, YTL\textsuperscript{+95}].

Experiment [OL22, PSZ21, BFN\textsuperscript{+14}]. Experimental [CMM\textsuperscript{+15}, DO93, DBDS94, OLR\textsuperscript{+96}, SMT92]. Experiments [SGR\textsuperscript{+15}, Ham09, YBL13]. expert [CF10, Kip92]. Explainability [RXX\textsuperscript{+19}].

Explicit [BHB16]. Explicit-Data [BHB16].

Exploiting [CGPP15]. Exploration [CS22, QNR13]. Explorations [PBU16].

Exploratory [TTL\textsuperscript{+21}]. Exposing [LBZ14].

expressions [KGA\textsuperscript{+12}]. Expressive [TG11, BLW09, WJ10]. Extended [EM15, EM18, ZE14, LY05]. extensibility [BJM02]. Extensible [TG11].

Extracting [KM10].

Extraction [ASNB19, BXX+22, WCP18, WJ10].

extractors [MG19].

Facet [DGK21]. Facet-oriented [DGK21]. faceted [DFB99a, DFB99b]. Facilitating [RKBL19, YBL13]. factors [SAB\textsuperscript{+14}].

factory [BCC92, FLM\textsuperscript{+98}]. Failed [JA22].

Failing [TLP\textsuperscript{+22}]. Failure [NL11, Wey96]. Failure-Causing [NL11].

Failures [JO15, LIL\textsuperscript{+20}].

Fairness [WYW\textsuperscript{+22}].

Fairness-Aware [WYW\textsuperscript{+22}]. families [BDC02].

Family [GHM18, RBK19, SGR\textsuperscript{+15}, WFF\textsuperscript{+19}].

Family-based [RKBL19]. Fan [MVM07].

Fan-In [MVM07].

Far [CL22, GLL\textsuperscript{+21}, ZYL\textsuperscript{+18}].

Farewell [RAS19].

Fault [AROK21, EKL\textsuperscript{+19}, KMYK19, Kuh99, NBKM22, TSPRC18, YHC13, YXK\textsuperscript{+17}, CCX11, Hie02, Hie09, KB07, LY05, MA14, SMT92, TK02, XCKX13, ZLXL14].

Fault-Prone [AROK21].

Faults [HZBS14, MZA22, SRTR17, LS13].

Faulty [SYA21].

Feasibility [EK11].
[ABC+22, CLBY18, FN03, HLL+16, RWEB19, WRD+22, ZS97, ZZL+06].

Feature-Guided [CLBY18]. Features [JZL+19a, KS22, KMYK19, DR10, Zav04].

feedback [GJ08]. FEMOSAA [CLBY18].

Field [DPB17, JO15]. finding [CSX08].

Fine [FGZ+20, BRR01, DL13].

Fine-grained [PGZ+20, BRR01, DL13].

Finite [BM13, DDM22, EM18, Cor00].

Finite-State [EM18, Cor00]. Firmware [WRD+22]. First [DR15]. Fixed [OL22].


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

Flow [CH21, DCCN04, For94, HB22]. flow-sensitive [For94]. flows [MP09].

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

Foraging [FSP+13]. Formal

[BP05, CTA+21, CR94, EWS14, GXSC21, RO18, YJW+20, AG97, AG98, BRRP05, BKM07, CS12, CMCP+99, CRST12, CPPRM03, FP02, MMST14, PG12, SCK13, VTA04, SB06].

Formalizing [AAG95, CD98, CPF96]. formally [CMCP+99]. formatters [vdBV96].

Formed [TC20]. formulas [XCKX13]. forward [Ros13a]. Found [MA22].

foundation [SCK13]. Foundations [KF07].

Four [ZJ97, CD08]. frames [KK04].

Framework [AEK+16, CTA+21, DR11, KAT12, MS15, WWZ+22, XW22, YBL15, BCTW96, CDP04, CDFG96, Dev99, For94, MS06, SGL12, WGG13].

free [KGA+12, vdBV96]. Freedom [ABB+18].

front [Dev99]. front-end-retargetable [Dev99]. FSMs [HT17]. Full [SRTR17].

Full-Word [SRTR17]. Function [CXLG22].

Functional

[Bro93, GD08, RST+14, MGP+13].

Functions [BCGB21, Hie09, MPG+13, VKV03].


Gas [ZOJH21]. general [CCX11].

Generated [CMM+15, LS13, WGSDD07].

Generating [ARG17, DRW96, GXC+20, HT17, IC14, SSB20, YJW+20, KL93].

Generation [Arc19, AG20, BFFG19, FA14, FSM+15, GZX+22, GSYT21, HLL+20, HAB+20, HCW+22, MZA22, MGTR18, SMBO21, WXL+21, XVN22, ZA22, ZZS+22, vdBV96, EFO5, FK96, FRB+06, HZS08, PWX14].

Generative [KAT12]. Generator [NKWF14, DO93]. Genetic [CWM+20, LL00]. Genetic [DBNG15, YXK+17]. GENOA [Dev99].


Goals [BS16, DBPU13]. Google [CCH+21]. governed [MU00]. GQM [FLM+98].

grained [BRR01, DL13, PGZ+20]. grammars [KGA+12]. grammarware [KLV05].

Graph [ARL+15, CWH+21, NBMK22, PTY95, MNGL98]. graphical [DKM+94, MRK+97].

graphs [SRK06]. GreASE [dFLSV14].

Group [BSA22]. growth [JMS08].

guarantee [CAC08]. Guaranteeing [ALMS22].

GUI [ABC+22, Mem08, XM07, XM08].

GUI-based [XM07]. Guide [HAB+20].

Guided [CLBY18, PWX14, WRD+22, TCDZ19].

Guidelines [FTF22, GGZ+15, GLFW22].

GUIs [LVBBC+18].

HAMPI [KGA+12]. handle [LLYC14].

handlers [CMP13]. Handling [AG20, ZE14]. hard [CAC08]. HCS [YJW+20].

healing [CMLP13]. Heap [LKR22]. Help [FSM+15]. heterogeneous [MU00].

Heuristic [ZHO+18, ZZX+21].

Hierarchical

[YWC16, BO92, SLD+13, WJ10].

hierarchies [CCX11]. hierarchy
[BM13, DFB99a, DFB99b, LY05].
hierarchy-aware [DFB99a, DFB99b].
high-quality [CF03].

Higher-Order [GXSC21, LWF03].
Highly [AMS+18].

History [ARG17, OPK+21, FM94].

History-based [OPK+21].

history-checking [FM94].
Hoc [CDKP21].

Holistic [FDC+21].
Home [FSZ+22].
hosts [MPR06].

HOTTest [SS06].
Human [HCW+22, SPAS21, YKK+17, CDFG96].

human-centered [CDFG96].
Hybrid [GXSC21, GSH97, ZMM+16, CRST12, CSX08].
Hybridized [BBS16].

Hyper [ZHO+18].
Hyper-Heuristic [ZHO+18].

Hypermutation [ZA22].
Hyperparameter [LLSM22].
hypotheses [Hie02, Hie09].

ICSE [MP14].
IDE [XVN22].

Identification

GHM18, WRD+22, ZSW+22].
Identifier [SRTR17].
Identify [HNRA20].
Identifying [CDKP21, GLL+21, MVM07].

III [MKS+15].
Image [CCX+20].
Impact [CST16, ELvdH+05, FAP22, LLSM22, LLS+21, PVHW17, Tiw08, ZLW+21, EAS08, MA14, RSB05, SGG+14].

Impact-Driven [PVHW17].
Impacts [TDT+22].
Implementation [KDM17, Liu22, ZCT18, BO92, BPT10, LH08, SB02].

Implementations

[GZSW19, TTL+21, TCDZ19].
implementing [CDP04].
implicit [SPAK10].

implied [UKM04].
Important [LXL+22].

Improve [ABC+22, CCH+21, VHNF22].
Improved [CST16].

Improvement [CXH+21, SR05].
Improving [ASNB19, BGO+14, Cai20, WYMW20, YHL+22, DPT13, CJ08, LH02].

In-Depth [XCS+22, ZXLC14].
In-IDE [XVN22].
In-Process [WYW+22].
Incoming [Pez19d].
inconsistencies [CDFG96, GZ05].
inconsistent [HN98].
Incremental

[DPB17, UKM04, YPRK14, KK93, KF07].
incrementally [KKLS02].
Index [Ano96, TPT13].
index-sensitive [TPT13].

Indicators [AAP+20].
Inductive [ASJD21, BG96].
Industrial [OKS+16, CMCP+99, FLM+98, SR05].

Industrially [VHNFW22].
Industry [MS22].

Industry-Academia [MS22].

Inference [NBB15, SMY19].
Inferring [EM18, MG00, RO18].

Inflow [ZMM+16].
influence [Sin10].

Information [FSP+13, WCB+20, DFT07, FBC+13, GSH97, MP09, PG12, TZZ09, THH06, Wey96, YHC+13].
information-theoretic [YHC+13].
infrasctructures [BDL06].

inheritance [KKLS02].

inheritance-based [KKLS02].
inner [SAB+14].

inspections [BFN+14, PSMV98].
installability [VD13].

Instances [ESR+15].
instruction [AM04].

IntDroid [ZHY+21].
Integer

[DLRA15, XL20].

Integrated [YB20, CTCC98, ELN+92, PWD+99, SCK+13].
Integrating [BFFG19, FRB+06, GSH97].
ipnegration

[BCTPW96, BHR95, SN92, YHR92].

Integrity [MWK15].

Intellectual [CSV13].

Intelligent [PLM15].

Intensive [N2B+18].

Inter [SEM17].

Inter- [SEM17].

Interacting [CRT09, SYA21].

Interaction [AB12, MU00].

Interaction-Based [AB12].

Interactions [ASMP16, PWX14].

interchangeability [DPT13].

Interface [PSZ21, CL94].

Interfaces [IC14, BRP05, BTI14].

international [NP08, MP14].

Internet [YBZK21].

Interpretation

[LRL+22, WCG+21, CSC06].

interpreters [BP05].

Interpreting [ZZ+21].

Interprocedural [O92, SHR01, For94].

Interval [SMY19, CDM10, DKM+94].

interval-based [CDM10].

Interventions [RPT+22].

Intimacy [ZHY+21].

Intra [SEM17].

Intra-Component [SEM17].

Intrinsic [CGPP15].

Introduction
[GLFW22, HP15, MP14, NP08]. Invariant
[NKWF14]. Invariants [NKWF14].
investigating [HBB’09, CXLG22].
Investigation [LRCS14, WWZ’22, MC08].
Investigations [Of92]. invocation
[SPAK10]. Involvement [ZMM’16]. IoT
[SLBK22]. IP [MR99]. iSENSE2.0
[WYMW20]. Isolation [JZL’19b]. ISSTA
[NP08, HP15]. Issue [HP15, MP14]. items
[Gun00]. Just [TS09]. J-Orchestra [TS09]. Java
[BS07, Cor09, HRD08, KM10, LTX19,
MRR05, RD15, STRT17, TS09, XR13].
JavaScript [ASMP16, NXL’22]. Johan
[Ano02]. Join [BT114]. Journal [DR15].
Journal-First [DR15]. Journey [ZYL’18].
Just [NXL’22]. Just-In-Time [NXL’22].

KBSE [DJ97]. Key [GCX’22, SAB’14].
Killing [CPCT21]. KLEESpectre
[WCB’20]. Knee [CLBY18]. Knee-Driven
[CLBY18]. Know [YZP’22]. Knowledge
[CH21, GZK’22, MS22, FMMH’14, KK04,
MG00]. knowledge-based [KK04, MG00].
Kristen [Ano02].

L2S [XW22]. Label [VCF21, ML00].
Language [AROK21, KJHY22, LLZ’22, WB13,
XVH22, BgdV92, CL94, CFM00, GZ05,
JPL98, SH095, TY92, WAF00, MRR02].
language-based [BgdV92, WAF00].
Languages
[Bjo19, FTF22, BJMH02, BHR95, CDSM10,
DvdHT05, HZS08, KSD08, RSB05, vdBV96].
Larch [CL94]. Larch/Smalltalk [CL94].
Large
[BNB14, DNRN15, FA14, LJJ’20, LLZ’22,
MNB+22, Rus21, YZP+22, MC08, PSV01].
Large-Scale [BNB14, FA14, LLZ’22,
MNB+22, Rus21, YZP+22, PSV01]. latent
[BGO+14]. Lattice [DDE11].
Lattice-Based [DDE11]. Law [MU00].

Law-governed [MU00]. laws [LSV08].
layers [SB02]. Layout [LKR22]. lazy
[FC00]. leak [XR13]. Leakage [WCB’20].
Learn [KMYK19]. Learn-to-Rank
[KMYK19]. Learning
[ASNB19, BS16, BT22, CYA22, DKD21,
FCLL21, HGW’16, HGC’22, KKP’22,
LGX’22, MPT’21, MS15, NBMK22,
RMCT22, TWB’19, WLS’20, WCP’22,
YHL’22, ZLW’21, ZZB’21, BG96, MY13].
Learning-based [BT22, ZZB’21]. legacy
[THHB06]. Less [PBU16]. Level
[BNB14, DG18, AM04, CTCC98, KSD08,
MMST14, Sin10]. levels [CTC01].
Leveraging [CH21, VCF21]. lexical
[MN96]. libraries [ZW95]. Library
[DKD21, OHDB92]. Life [VCF21, SS02].
Lightweight [GHM18, MN96, Jac02].
LIME [MPR06]. Line
[CTA’21, DL11, ZCT18]. Linear
[SP18, ZAW92]. Lines [HLL’20, HAB’20,
XZZL18, BMH02, KATS’12, MPG’13].
Linking [KS20, SZH’19, FC00]. links
[DFOT07]. Literature
[LC5’22, SMBK21, TWS’22, WCP’22].
liveness [DBPU13, SGE00]. Local
[ABB’18, TC20, ZWGX22]. Localisation
[YXK’17]. Localization
[AFHC22, KMYK19, TSPRC18, MA14,
XCKX13, YHC13]. locating [TD01].
Location [RWEB19, PGM12, ZZL’06].
Logic [BMM’17, XLL’22, DKM’94,
PMS13, TPT13, ZS97]. Logic-Based
[BMM’17]. logical [FGL’12, MS94].
Logics [DDMV22, D97]. looking
[Not13, Ros13a]. loop [BH11].
loop-assigned [BHL11]. Loops [RD15].
LSCs [MHK11]. LTL [BLS11].
Models-Detection [ZFL+12], modern [RSB05].

Modularity [CS12, HE13, SPAK10].


Multi-Criteria [OKS+16, XL20].

Multi-Language [AROK21]. Multi-Level [DG18]. Multi-Objective [CLBY18, LVBB+18, ZHO+18, SYA21, XL20].

Multi-Step [BS16]. Multi-valued [CDEG03]. Multiagent [DL11, ZJW03].


Mutation [KJHY22]. My [CCH+21, CXH+21].

Names [SRTR17]. Natural [KJHY22, XVIN22, GZ05]. need [LYYC14].

nesting [MBH09]. Network [CWW+20, CWH+21, RXX+19, WLS+20].

Network-based [RXX+19]. Networks [LLSM22, PLM15, XLW+22, Sin10].

Neural [CWW+20, CWH+21, LLSM22, RXX+19, TWB+19, XLW+22].

Neuron [XLW+22].

next [HKMB+14]. Node [LJL+20]. Non [GGZ+15, HT17, MWP+21].

Non-Adequate [GGZ+15].

Non-deterministic [HT17].

Non-Serializable [MWP+21].

nonanomalous [DBU13].

Nonequivalence [dFLSV14].

noninteractive [ZZL+06].

noninterference [DFG00]. notation [FP02, Jac02]. notations [BP05, CDP04].


Obfuscation [GHM18]. Obfuscation-Resilient [GHM18].

Obituary [An02]. Object [AB12, GGGU21, LHX21, MS94, TG11, CA95, CTCC98, CTC01, CSC06, DFB99a, DF94, Jac02, MRR05, RS09, RM03, SS02, SB02].

Object-Oriented [AB12, MS94, CTCC98, CTC01, CSC06, DFB99a, DF94, RS09, RM03, SS02, SB02].

Object-Sensitive [LHX21]. objected [DFB99b]. objected-oriented [DFB99b].

Objective [CLBY18, HLL+16, HLL+20, LVBB+18, MKS+15, SHLL21, TAA+19, XZZL18, ZHO+18, SYA21, XL20].

obliviousness [HE13]. OBSERV [TY92].

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

Ole-Johan [Ano02]. One [Liu22]. Opacity [ALMS22]. Open [BSA22, BKHT21, CWM+20, PLZ+22, RGCS14, TWS+22, WFW+20, MFH02, Sin10].

Open-Source [BSA22, PLZ+22, RGCS14, Sin10].

OpenStack [ZLT+22]. Operational [SZH+19]. operators [ORL+96]. Opinion [LC+22, CF10]. Opportunities [YXL+22].

Optimal [HLL+16, Liu22]. Optimization [CLBY18, CS22, HLL+16, LLSM22, LVBB+18, XZZL18, AGHC+22]. Oracles [WPB19, XM07]. Orchesta [TS09]. Order [GXSC21, SGD15, LWFO3, TPT13].

organizational [DCS09]. Organized [ZWCH21]. Oriented [AB12, ZSL+13, AM11, CTCC98, CTC01, CSC06, DFB99a, DFB99b, DF94, DR10,
FGL+12, HE13, DGK21, MS94, ODV+09, RS09, RM03, SB02, SGR+10. OSS
[KS22, ZMM+16]. outcome [GJ08].
Outgoing [Ros19]. output [KM10, QNR13].
Overflow [ARG17, DLRA15, GXG+20, YZP+22, ZWCH21]. overlapping [HaK92].

Pacemaker [BZSW14]. Pan [BGdV92].
Pandemic [FSZ+22]. Parallel [HT17, KK93, PSV01, RD15, ZCH22, SMAC08].
Parameter [TG11]. parameterization [BAD08]. Parameterized [MRR05].
[FDB+12, LHX21, PBU16, SGD15, XCCY10]. Partial-Order [SGD15]. Participation
Patch [LWWM22, MGTR18, STGR21, TLP+22].
Patches [KPC18, TWB+19, ZSW+22].
Path [DDE11, GSYT21, QNR13, SGD15, TPT13, XLW+22, LS13, SRK06]. Path-
TPT13. Path-Sensitive [SGD15]. Paths
[YWC16]. Pattern [CZ19, SGR+15].
Pattern-based [CZ19]. Patterns
[KAS20, DDGR18, MS22, ZB13]. Peer
[RGCS14]. Penetration [MAK22].
Performance [CFL+16, LLSM22, LS+21, RX+19, ZHZ+21, Tiw08]. Person
[ZSHD20]. Personality [CL22].
Personalized [ZL13]. Perspective
[BXL+22, FSP+13], pervasive
[MZ09, XCCY10]. phase [JGJ12]. philosophies [MSW12], physical [CYA22],
pilot [XM08]. PL [DL11]. Place [MS15].
Place-Aware [MS15]. Planning
[CSW21, OL22, ZHO+18]. Plasticity
[BT22]. Platform
[EHEZ21, LJJ+20, ZOJH21], Platys
[MS15]. Play [CCH+21]. Point
[BCCGB21, BTI14]. Pointer [LHX21],
pointers [OSH04]. points [LH08, MRR05],
points-to [LH08, MRR05]. Policies
[BBS16, BKHT21, BLW09]. Polychronous
[GGLT07]. Polynomial [NKWF14].
Popular [CCH+21]. Portfolio [MPG+13].
Post [CDKP21, JMS08]. Post-release
[JMS08]. Posteriori [DG17]. Posts
[ARG17], potentially [ZLX14]. Power
[LSV08]. Powered [ZOJH21, CCY+21].
Practical [BCGB21, CWW+20, HBI22, SZH+19, SS20]. Practice
[BXL+22, ELvdH+05]. Practices
[BKHT21]. Practitioner [BXL+22].
pragmatic [HW12]. Pre [LLZ+22].
Pre-Training [LLZ+22]. Precise
[AB12, KMYK19, LRCS14, XR13].
Precision [LHX21, PSW+20].
Precision-Preserving [LHX21]. Predicting
[LJJ+20, MBH+17, TLP+22, ZHZ+21].
Prediction [CYA22, CXH+21, FAP22, NXL+22, SMY19, ZL13, ZYL+18, ZXL14].
Predictions [ZZZ+21]. Predictive
[KJHY22, LRCS14, XYL+22, HZZ13].
preliminary [YTL+95]. presence
[FYD+08, FC00, Hie02, OSH04].
Preserving [LHX21, YHR92]. Prevalence
[MA14, ZLT+22]. PRIME
Prioritization
[EM15, HZZ+14, ZZY+21, ZCH22, YHC13].
Privacy [BBS16, ML00]. Proactive
[SMBK22]. Probabilistic
[EM18, PBU16, JGB12]. Probable [XW22].
Problem
[SKBD14, XL20, HKMB+14, MY13].
procedure [BHR95, MGP+13]. Process
[BCFM06, PVHW17, LDUD13, TC20, WYW+22, ACF97, BCD02, BAD08, CW99, DHW98, GRT09, 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 [ZFL+22, ATW94, Bre95].
Product
[CTA+21, DL11, HLL+16, HLL+20,
XZZL18, ZCT18, BJMH02, KATS12, MC08.  
products [BJMH02]. production  
[TSB92]. products [JMS08]. profiling  
[XR13]. Program  
ASJDW21, BHR95, CH21, GWd+21,  
GRS+16, MTRK14, RKBL19, XW22,  
YWCI6, YB20, ZFL+22, BG96, BGH07,  
BG98, DBGU13, EF05, GN93, HZS08,  
KM10, LH02, OSH04, SLB+21, YHR92.  
Programmed [EKL+19]. Programming  
[AFY+22, DBNG15, BXX+20, CWM+20,  
FTF22, KS20, KAT12, MZ09, SP18, XL20,  
YXK+17, HE13, Kli93, RSB05, SHO95].  
Programs  
BCGB21, EK11, GXSC21, GSYT21, IC14,  
KMYK19, LKR22, NBMK22, CTCC98,  
CF03, Cor00, DF94, FC00, HZZ13, MP09,  
PTY95, QRLV12, SMAC08, TS09, YTL+95.  
Progressed [GLL+21, ZYL+18]. Project  
[ZYL+18, Sin10]. Projections [MQLR16].  
Projects  
FAP22, JA22, NXL+22, PLZ+22,  
RGCS14, WFW+20, ZMM+16]. Promise  
[XVN22]. Prone [AROK21]. Proof  
[FC00, RO18]. proofs [KKS02].  
Properties  
[EHF20, LBZ14, LLIS22, CK99, DCCN04,  
FPB+05, JGB12, Sin10, SE00]. Property  
[CSV13, DDE11, NBB15]. Prospective  
[Pez22]. Protecting [ML00, ZWGX22].  
protocol [Ber94, Pet97]. Protocols  
[GGGU21, CJM00, DFG00, PBCT10].  
prototyping [TY92]. Prove [RO18].  
provenance [MMGM11].  
provenance-aware [MMGM11]. psc2code  
[BXX+20]. Psychometrics [GLFW22].  
Publication [DR15]. purely [FPB+05].  
PVS [MPF14]. Python [HAB+20].  
[VTA04]. QoS-enabled [VTA04].  
Qualitative [AMS+18]. Quality  
[AAP+20, CDKP21, FTF22, HCW+22,  
MBH+17, CF03, GL14, MGP+13].  
Quantifying [GZSW19]. quantitatively  
[CW99]. queries [WGSD07]. Query  
[LXL+22, MBH+17, PJRR10, WGG13].  
Question [GXG+20, GXLG21]. questions  
[KM10]. Quo [WFF+19]. QVM [AVY11].  
Race [JPS22, RD15]. Random [TAA+19].  
Randomization [ZWGX22]. Rank  
[KMYK19]. Rationale  
[ZLT+22, FBC+13, YTL+95]. Re  
ZWGX22. Re-Randomization  
ZWGX22. Reachability  
[LHX21, CK96, CK99, PTY95]. reactive  
[FS93]. Read [Led22]. real  
[Cal95, FM94, FP02, GGLT07, MRR+97,  
Ost99, Pon02, SLD+13, WME93]. real-time  
[Cal95, FM94, FP02, GGLT07, MRR+97,  
Ost99, Pon02, SLD+13, WME93]. Really  
[FSM+15, YZP+22]. Reasoning  
[EBE+14, FPB+05, GZ05, PRM01, CAC08,  
HN98, RMP97, VTA04]. Recall [PS+20].  
ReCDroid [ZSL+22]. Recommendation  
[GXGL21, WYW+22]. Recommendations  
[OPK+21]. Recommenders [AM11].  
Recommending  
[DR11, JZL+19a, SYA21, STS+18].  
recompilation [ATW94, Bre95].  
Recomposition [BBS16]. Reconciling  
[SN92]. Recovering [DFOT07]. reduce  
[Cor00]. reduced [Ber94, Pet97]. Reducing  
[AM11]. Reduction [ZWL+22, DBDS94].  
Redundancy [CGP15, HZS13].  
Reengineering [Sne96, CF03]. Refactor  
[PZ+20]. Refactoring [DG18, FP+13,  
OKS+16, TDT+22, VBZ+18, SGL12].  
Refactorings [PLZ+22]. refree [ACM05].  
reference [BCC92]. Refinement  
[ASJDW21, Ost99]. refinements [SB02].  
Reflection [LTX19, Pez22, 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 [BT22, FCLL21, RMCT22].
Reject [PLZ+22]. Relatedness [MB15].
Relational [MWK15, FPB+05].
Release [OL22, ZHO+18, HKMB+14, JMS08]. relevant [MPG+13]. Reliability [ZLI13, JMS08, PPM+99, Wey96].
Remodularization [CBRO16, MKS+15].
Reproduction [ZSL+22]. Required [LK14]. Requirements [DPB17, GL11, LKR+22, DGD+19, RST+14, WFF+19, ZZY+21, CRST12, CD98, GM01, GZ05, HJL06, SMT92, SR05, UFG14, ZJ97].
Resampling [SMY19]. Research [CL22, MS22, SF18, WCP+22, EAS08, ELvdH+05, RSB05]. Residual [LRS+14].
Resilient [GHM18]. Resistance [GZSW19].
Retention [ZMM+16]. Retrieval [MBH+17, SURL11, WX+21, ZWCH21, DFTOT7, PGMI2]. Retrieval-based [WX+21]. Retrieving [PP93].
Retrospective [Pez22]. Return [ZWGX22]. reusable [BO92, PP93]. Reuse [FSP+13, DGD+19, VHNF22, EF05, Hen97, HW12, MC08, OHDB92]. reverse [AM04].
Robustness [ABC+22, ZFL+22, ZSZ+22].
Role [SPAS21, GJ08]. router [CR94]. rule [Cia93, Kip92, MM13]. rule-based [Cia93, Kip92]. Rules [ARG17, MFLL12, KK04]. Run [ZHZ+21].
Run-time [ZHZ+21]. Runtime [AVY11, BLS11, EKL+19, XMA+14, ZWGX22, BLW09]. Rust [XCS+22].
SAEO [GSYT21]. safe [BRR01, BTI14, RH97]. Safety [XCS+22, BFN+14, CK99, SGE00, SRK06].
SAFKASI [WAF00]. Sample [ZLW+21]. Sampling [DD11, PP93, PPM+99].
scientific [CY11, EF05, LYC14]. Scope [MB20]. Scores [RO18]. Screen [RST+14].
Screening [BXX+20]. Scripts [RRPW21, RO18]. SEADS [FCLL21]. Search [AAP+20, AG22, BS16, CCX+20, OKS+16, SYA21, SMBO21, SURL11, SED14, TC20, XL20, ZHO+18, ZZY+21, ZA22].


Selfdeconstruct [CXLG22]. Semantic [BAD08, CLL+22, MB15, PJRR10, YHL+22, MG00, KKP+22]. Semantic-Based [CLL+22]. Semantics [EHF20, LXL+22, LK14, SZH+19, HN96, YHR92].


Socio-Technical [JA22]. Sociotechnical [KAS20]. Software [AAP+20, BNB14, BXL+22, BSA22, BKHT21, Böh98, CL22, CBO16, CTA+21, CLBY18, CCY+21, CWH+21, CWS11, CW99, CFT+16, CZH9, DWH98, DR15, DRRN15, EWS14, EM18, EF05, EW11, FSZ+16, FSM+15, FT62, FZG22, GLFW22, HLL+21, HH95, JPPS22, KS12, KPC18, LCS+22, LGX+22, MB+22, MFF+22, MGP+22, MFL12, MBH+17, MY13, MB20, MKS+15, MP14, OKS+16, RKB19, RGCS14, SP18, STS+18, SBMK21, SMBK22, SLY19, SF18, SGW22, TDT+22, TWS+22, UGKR22, VHF22, WB13, WPB19, WC+22, WOM15, XZZ18, XL20, YXL+22, YQTR15, ZSHD20, ZH+21, AACG, AC07, BCTW96, BO92, BGO+14, BCD02, CS12, CTC01, CM08, Csa9, CW98, CDP04, CD98, DVDH05, DFO7, DCCN04, ELN+92, ELvdH+05, FK96, FML+98, GJO8, Gun00, HBB+99, Hen97, HW12, JPL98, JMS08, KKK93, LAL13, LSV08, MMST14, MRR02].

software [MSW12, MFH02, MC08, NLR11, NP08, Off92, ODV+09, PSV01, PP93, PMM+99, PSM98, Rob08, RSB05, SRK06, SN92, SHO95, TZZ09, Tsw08, TBS92, UFB14, VD13, WP93, WGG13, XM07, XR13, ZW95, ZW97, DKD21]. Software-2.0 [DKD21]. Software-engineering [XL20].

Solution [LJL+20]. Solutions [WLS+21, XL20]. Solved [XCS+22]. solver
[KGA+12]. Solvers [XZZL18]. Solving
[AGRR19, CH21, SSB20, SED14, XL20].
Some [HZBS14]. Sound [MWP+21, XL20].
Source [BSA22, BKHT21, CWMT20, DNRN15, HNRA20, KS20, KJHY22, MB15, PZS+20, PLZ+22, RGCS14, SGR+15, SRTR17, SED14, TWS+22, WLS+20, WFW+20, Dev99, DER10, MFH02, MN96, RM07, SGG+14, Sin10, SAB+14].
Source-Code
[DNRN15, SGR+15, SGG+14]. sources
[PSMV98]. Space
[STS+18, CD98, DBDS94]. Special
[HP15, MP14, N00]. specialization [N02].
Species [Böh18]. specific
[BJMH02, BGL00, HZS08, SS06].
Specification [KAS20, KL21, XVW22, ZW97, Bro93, CDSM10, CL94, CR94, ELN+92, FN03, Kuh99, LY05, MS94, PPP94, RPM97, TK02, WME93]. specification-based
[Kuh99, LY05, TK02]. Specifications
[EHF20, PSW+20, CCX11, DSV03, FM94, HJL96, HRD08, HN98, J09b, KB07, MMST14, MS03, P012, PMS13, UKM04, WP93, FPAG07]. specify [CFM00].
Specifying [PSZ21, DKM+94]. spectra
[NLR11]. spectra-based [NLR11].
Spectrum
[TSPRC18, YXK+17, MSW12, 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, GXX+20, YZP+22, ZWCH21]. Stacks
[ZWGX22]. STADS [Böh18]. Stand
[UGKR22]. Stand-alone [UGKR22]. State
[EM18, MS14, PSZ21, RWEB19, WB13, Cor00, DBDS94, WJ10]. State-Based
[BW13]. statecharts
[BRG+01, HaK92, HN96]. Stateful
[BPSSA+22, SLD+13]. STATEMATE
[HN96]. States [LCZL14]. Static
[HNRA20, IYW00, KMYK19, RD15, RWEB19, RM03, VLI+18, WGS07, BGG07, FPB+05, GSH97, MNL98, O092, ZZL+06]. Statically [CWH21]. Statistical
[RGCS14]. Status [WF+19]. Step
[BS16, SLB+21]. Stepwise [EK11].
Stochastic [CFL+16]. Storage [ZWGX22].
strategy [JW94]. stratified [PMM+99].
StreamGen [GTD21]. Streaming
[GTD21]. strength [MP09]. Stress
[DBNG15]. string [TPT13]. strings
[KGA+12]. Structural [Kip02]. Structure
[GRS+16, WB13, RM03]. structured
[BP98]. Structures [KMD17]. Structuring
[J09b]. Stubborn [CPCT21]. Studies
[Cai20, SPAS21, B07, CD98, HBB+09, MFH02]. Study
[AROK21, AMGBK22, CWMT20, CCH21, DK21, EHEZ21, FAP22, FSM+15, GLL+21, HGC+22, LSLM22, LLS+21, NXL+22, ODE21, OKS+16, PZS+20, RRPW21, Rue21, TTT21, TWB+19, UGRK22, VLI+18, XCS+22, YZP+22, ZOJH21, ZE14, ZHO+18, ZA22, ZMM+16, BJMH02, BRR01, BGG07, CF10, GHK+01, MB07, MNL98, PSV01, SMT92, SR05, Tiw08, TBSS92, XM08, ZLCH14]. style
[AAG95]. Subject [DPB17]. Success
[Rue21, Sin10]. Successful [JA22].
sufficient [OLR+96]. Suggestion [ODE21].
Suite [HLL+20, Ber94, HGS93, Pet97, REM+04, XL20, YTL+95]. Suites
[GGZ+15, Mem08]. Summaries [PXJ17].
Summarization [CXX+21]. Super
[AGHC+22]. Super-optimization
[AGHC+22]. Support
[DBNG15, JO15, SURL11, ZCT18, BFN+14, HWH14, MS03, RM03]. Supporting
[BG98, DR10, Ham09, MP06]. Survey
[MFBF+22, PKHM22, TWS+22]. Surveys
[WF+19]. Sustainability [Cai20].
Symbolic
[AEK+16, BHB16, CPCT21, Esh06, KPC18, LCL14, RGS12, WCB+20, YPRK14, BGL00, CDEG03, QNR13, SMAC08].
symmetry [SGE00]. symmetry-based [SGE00].
Synchronisation [AGRR19]. synthesis [MMST14]. synthesized [PWX14].
Synthesizing [DBPU13, WJ10, XW22, DL13]. Synthetic [SMY19].
Synthesized [PWX14]. Synthesizing [DBPU13, WJ10, XW22, DL13]. Synthetic [SMY19].
System [AG20, BLX+20, CYA22, LBZ14, PBU16, SSB20, ZA22, ZCT18, BGdV92, CDSM10, IYW00, MMST14, MG00, OHDB02, RVMM04, TBS92, WME93]. system-level [MMST14].
Systematic [LCS+22, SBMK21, VHHF22, WCP+22, HBB+09, MS03].
Systematizing [HW12]. SystemC [YJW+20]. Systems [AMS+18, AGRR19, AFHC22, AVY11, BN14, BT22, CLL+22, CW+20, DL11, DPB17, DDJ22, EKL+19, FDC+21, FCLL21, KAS20, MPT+21, MFBB+22, NWB+18, PSS+20, SYA21, TG11, YBZK21, ZHZ+21, BO92, BCD02, Bro93, Cal95, CMP13, CY11, CF00, CRST12, CDFG96, DFOT07, DJ97, Dkm+94, DCCN04, FM94, FP02, FS93, GM01, JGB12, Kip92, KK04, LYYC14, MU00, MS94, MRR+97, Ost99, ODV+09, Pon02, RM03, SL+13, TZZ09, THBB06, WAF00, ZJW03].
TACCLE [CTC01]. Tactics [YBZK21].
Tagger [WYMW20]. tailoring [CF10].
tasking [Di03]. Tasks [FSP+13, MBH+17, TTL+21]. taxonomy [UFG14]. Teams [CFL+16]. Technical [GLG21, GLL+21, JA22, RXX+19, UKR21].
technique [KL02, RH97, SS06, SB02]. Techniques [Bjo19, RD15, BRR01, GHK+01, SM12].
technology [EAS08]. telecom [MC08].
telecommunication [Zav04]. Templates [CWM+20]. Temporal [CY11, DDMM22, Pon02, LYCC14, PMS13].
Tensor [BSA22]. Term [VKV03].
Termination [TAA+19, Di97]. Terminology [MGP+22]. Terms [WB13].
Test [Arc19, AG20, CMM+15, DPT13, EM15, FA14, FSM+15, GRS+16, GGZ+15, GSYT21, HZZ+14, HLL+20, HAB+20, HGC+22, IC14, KB07, MPT+21, MZA22, MWK15, MGTR18, SYA21, SMBO21, SSB20, TLP+22, XL20, ZA22, ZCH22, Ber94, BRR01, DO93, FK96, FRB+06, GHK+01, HGS01, HAB13, Hei02, Hei09, 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, MBH09].
Test [MAKM22]. Testers [FSM+15]. Testing [DBNG15, AG22, ABC+22, BG06, BT22, Böh18, CCL+22, CWW+20, CS22, DPB17, GGGU21, Hie14, KPC18, MJ+21, MAKM22, MB20, NPB22, NL11, PGZ+20, RMCT22, TCDZ19, TAA+19, WPB19, ZSHD20, Ber94, CTC98, CT01, CM08, DRW96, DF94, DSV03, FRB+06, Ham09, HAB13, Hie09, JW94, KSD08, Kip92, Kuh99, LY05, MPR+13, MBH09, Mem08, MS03, NP08, OF02, OSH04, Pet97, RBL+01, REM+04, SS06, SM12, TM14, TK02, Wey96, XM08, ZAW92].
testing-based [Ham09].
Tests [GWD+21, PKHM22, SPK14, ZE14].
Text [MBH+17]. Their [AMGBK22, WB13, MPG+13].
Thread-Local [ZWGX22]. Threats [AMGBK22]. Three [BM07, ZMM+16, CSC06]. Time
[NXL+22, TDT+22, WWZ+22, Bro93, Cal95, FM94, FP02, GGLT07, MS94, MRK+97, Ost99, Pon02, SLR+13, WME93, ZHZ+21].

**time-critical** [MS94]. **time-sensitive** [Bro93, Cal95]. **Time-travel** [WWZ+22].

**Timed** [ALMS22, BMM+17, PBCT10, SLR+13].

**Timeliness** [WPB19].

**TLS** [TCDZ19]. **Tool** [MBN+22, dFLSV14, CSX08, ELN+92, MS03, MPF14, YTL+95, ZW95]. **Tools** [CL22, FSP+13, Ham09, UGKR22, DRW96, TWB08].

**Type-Based** [CL22, FSP+13].

**Type** [ARL+15, KATS12, ODE21, SGD15, BGL00, TD01]. **Type-Based** [BLG00]. **Type-specific** [BGL00]. **Types** [ASJ+21, SPAK10].

**UI** [CCX+19, CCH+21]. **Ultra** [DNR+15, JLJ+20]. **Ultra-Large-Scale** [DNR+15, JLJ+20]. **UML** [BM13, BMM+17, BDL06, Esh06, FLL12, QT12, SGG+14, SB06, YBL15]. **UML-B** [SB06]. **unbounded** [JGB12]. **Uncertainty** [CYA22, OL22, SMK21, WPB19, ZZY+21, GJ08]. **Uncertainty-aware** [CYA22].

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

**Understanding** [ASMP16, DLRA15, DKD21, LTX19, NWB+18, PSMV98]. **Unified** [HZZ+14, ZS97, MRRR02].

**Unifying** [CST16, R09]. **Unit** [FA14, FSM+15, S08, MJS+21, SPK14]. **Unit-level** [KSD08]. **UNITY** [MR99, PRM01, RMP97]. **Unnecessary** [HNRA20]. **until** [JGB12]. **Unveiling** [WF+20]. **Update** [NBP+22].

**Update-driven** [NBP+22]. **upper** [CM08].

**Usage** [DKD21, KS20, MB20, UKR21, ZOJH21].

**use** [MPG+22]. **Use** [CDKP21, DGC14, SCK13, WCP+22, YZP+22, YBL15, DJ97, HBB+09, YBL13].

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

**Using** [AGRR19, BBS16, CL22, CBRA01, CWH+21, CFFM00, Cor00, ETM22, EM15, FL14, GSY+21, HLL+16, HAB+20, KS22, KMYK19, LRK+22, MVM07, MG+13, MKS+15, NBMK22, OKS+16, SYA21, Wey96, XM08, XMA+14, YZP+22, SLR+13, BS06, YBL15].

**Value** [NBP+22]. **Validation** [STG+21].

**validate** [CWM+20]. **Variants** [BRR+21]. **Variety** [CCL+19]. **Variety** [CMM+20].

**Validity** [JGB12].

**Validate** [JGB12]. **Validating** [AGRR19, BBS16, CL22, CBRA01, CWH+21, CFFM00, Cor00, ETM22, EM15, FL14, GSY+21, HLL+16, HAB+20, KS22, KMYK19, LRK+22, MVM07, MG+13, MKS+15, NBMK22, OKS+16, SYA21, Wey96, XM08, XMA+14, YZP+22, SLR+13, BS06, YBL15].

**Validated** [JGB12]. **Validation** [AGRR19, BBS16, CL22, CBRA01, CWH+21, CFFM00, Cor00, ETM22, EM15, FL14, GSY+21, HLL+16, HAB+20, KS22, KMYK19, LRK+22, MVM07, MG+13, MKS+15, NBMK22, OKS+16, SYA21, Wey96, XM08, XMA+14, YZP+22, SLR+13, BS06, YBL15].

**values** [CDEG03]. **Value** [CWM+20]. **Value** [NBP+22]. **Validator** [CYA22]. **value** [FB+13, H06].

**valued** [CDEG03]. **Variability** [AMS+18, VLJ+18].

**Variability** [AMS+18, VLJ+18]. **Variability** [AMS+18, VLJ+18]. **Variable** [CST16]. **Variant** [RKBL19]. **Variant-rich** [RKBL19].

**variants** [JFB+21]. **Variation** [E11, SPAS21, PSMV98]. **Verdict** [HE09].
REFERENCES

Veriﬁcation
[ASJ21, AGRR19, BCG21, BMM+17, BLS11, BDD+22, CSV13, CH21, DDI22, EWS14, FDC+21, GXSC21, HGW+16, LKR22, Liu22, NBB15, QT12, BGL10, CDSM10, CY11, DSV03, FGL+12, FGMP03, FYD*08, FC00, MPF14, SGE00, WME93].

Veriﬁed [AFY+22]. Veriﬁx [AFY+22].

verify [SMAC08].

Verifying [CJM00, GZSW19, DCCN04, SLD+13].

Version [ARG17].

versioning [ZS97].

Versions [VCF21]. via
[BGO+14, CS22, DDI22, FCLL21, GWD+21, GXLG21, KAS20, KJHY22, PWX14, SMY19, TWB+19, WCB+20, XLM+22, YHL+22, ZAW92, ZSW+22].

Views [DL13, Jac95b]. violation [LYYC14].

Violations [MWP+21, MM13].

Virtual [BFFG19, DHW98, Pon02].

Visual [ABC+22, CDP04, Di93, KSD08, MG00].

Visualization [KKP+22, BG98].

Visualizing [BLX+20]. vs [SRTR17].

Vulnerabilities [CWH+21, MS14].

Vulnerability [GWD+21, GCX+22, ZZX+21].

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

Weak [FDB+12]. web
[LASL13, BM07, BCFM06, BPT10, CGPP15, NBB15, SURL11, ZL13].

web-centred [LASL13]. Weighted
[HGW+16]. Well
[SURL11, TC20, ZWCH21]. Well-Formed [TC20]. white [CTCC98]. Who [STS+18].

Whole [SLB+21]. Whole-program
[SLB+21]. Wild [AFHC22, TWB+19].

Wireframe [CCX+20]. Wireframe-based
[CCX+20]. wise [ZZY+21]. within
[DHW98]. Witnesses [BDD+22]. Women
[TWS+22]. Word
[ETM22, SRTR17, KGA+12]. Words
[LXL+22]. Work [CXH+21]. Workarounds
[CGPP15]. workflow [CY11, LYYC14].

Working [FSZ+22]. world [Sin10].

Wrapper [THHB06]. Wrapper-based
[THHB06]. Wybe [Ano02]. WYSIWYT
[FRB+06].

XCode [LLZ+22]. XP [CF10]. XPIs
[SGR+10].

Z [Jac95b].

References

Abowd:1995:FSU

Ali:2020:QIS
REFERENCES


[AEK+16] Kapil Anand, Khaled Elwazeer, Aparna Kotha, Matthew Smith-
REFERENCES


<table>
<thead>
<tr>
<th>Reference</th>
<th>Authors</th>
<th>Title</th>
<th>Journal</th>
<th>Volume</th>
<th>Issue</th>
<th>Pages</th>
<th>DOI</th>
</tr>
</thead>
<tbody>
<tr>
<td>[AG22]</td>
<td>Arcuri and Galeotti</td>
<td>Enhancing search-based testing with testability transformations for existing APIs</td>
<td>ACM Transactions on Software Engineering and Methodology</td>
<td>31(1)</td>
<td>1:1–1:34</td>
<td>January 2022</td>
<td>10.1145/3477271</td>
</tr>
<tr>
<td>[ALMS22]</td>
<td>André, Lime, Marinho, and Sun</td>
<td>Guaranteeing timed opacity using parametric timed model checking</td>
<td>ACM Transactions on Software Engineering and Methodology</td>
<td>31(4)</td>
<td>64:1–64:??</td>
<td>October 2022</td>
<td>10.1145/3502851</td>
</tr>
<tr>
<td>[AM04]</td>
<td>Akgul and Mooney III</td>
<td>Assembly instruction level reverse execution for debugging</td>
<td>ACM Transactions on Software Engineering and Methodology</td>
<td>13(2)</td>
<td>149–198</td>
<td>April 2004</td>
<td>10.1145/3506800</td>
</tr>
</tbody>
</table>

**Abal:2018:VBH**


**Anonymous:1996:AI**


**Anonymous:2002:OOJ**


**Arcuri:2019:RAA**


**Azad:2017:GAC**


**Ali:2015:TBC**


REFERENCES

Breaux:2008:SPP

Bhatia:2016:MPG

Basili:1992:RAC

Bonnifati:2001:DDM

Bernardo:2002:AFS

Brambilla:2006:PMW

Bagnara:2021:PAV
Roberto Bagnara, Michele Chiari, Roberta Gori, and


Luciano Baresi and Sandro Morasca. Three empirical studies on estimating the design effort of Web applications. *ACM Transactions on Software Engineering and Methodology*, 16(4):15:1–15:??, September 2007. CODEN ATSMER. ISSN 1049-
REFERENCES

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


REFERENCES


[BTT14] Eric Bodden, Éric Tantau, and

Bi:2022:ASP


[CAC08]

Bao:2020:PDC


[Cai20]

Cobleigh:2008:BHD


[CAC08]

Cai:2020:AIM


[Cal95]

Callison:1995:TSO

Candela:2016:UCC

Chen:2021:HSI

Chen:2011:RFC
REFERENCES


REFERENCES


REFERENCES


REFERENCES


[Chang:2013:EHH] Hervé Chang, Leonardo Mariani, and Mauro Pezzè. Exception handlers for healing component-based systems. ACM Transactions on Software Engineering and Methodology,
REFERENCES

Corbett:2000:USA


Chekam:2021:KSM


Cimatti:2012:VRH


Cai:2012:FMA

REFERENCES

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

Chen:2022:BCT


Counsell:2006:IUT


Cai:2016:DUD


Chaki:2013:VAI


Chondamrongkul:2021:SAM


Csallner:2008:DCH


Castro:2021:FFS

Thiago Castro, Leopoldo Teixeira, Vander Alves, Sven Apel, Maxime Cordy, and Rohit Gheyi. A formal framework of software product line analyses.
REFERENCES


Chen:2001:TMO


Chen:1998:BW


Chen:1999:SPV


Cheng:2021:DSD

Xiao Cheng, Haoyu Wang, Jiayi Hua, Guoai Xu, and Yulei Sui. DeepWukong: Statically detecting software vulnerabilities using deep graph neu-

**Chen:2020:HCT**


**Chen:2020:PAE**


**Chen:2021:WMC**


**Chen:2022:WDS**


**Chen:2022:WDS**


**Catak:2022:UAP**

[CYA22] Ferhat Ozgur Catak, Tao Yue, and Shaukat Ali. Uncertainty-aware prediction validator in deep learning models for cyber-


[DCCN04] Matthew B. Dwyer, Lori A. Clarke, Jamieson M. Cobleigh,

Desai:2009:AMM


Diep:2011:LBS


Lucia:2018:DBD


DiStefano:2022:VDS


DeGiacomo:2022:MCM


Duala-Ekoko:2010:CRD

REFERENCES

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


REFERENCES


**deFrancesco:2014:GTE**


**DeLucia:2007:RTL**


**DeLara:2018:RML**


**DeLara:2014:WHU**


**Lara:2019:ARM**

REFERENCES

<table>
<thead>
<tr>
<th>Author(s)</th>
<th>Reference</th>
</tr>
</thead>
</table>
| Dilhara et al. | [DKD21] Malinda Dilhara, Ameya Ketkar, and Danny Dig. Understanding Software-2.0: a study of machine learning library usage and evolution. *ACM Trans-
REFERENCES


REFERENCES


DiNardo:2017:AFD


Denaro:2013:TA


Dyer:2010:SD


Dagenais:2011:RA


Dwyer:2015:EJF


Devanbu:1996:GTA


Durante:2003:ATE

[DSV03] Luca Durante, Riccardo Sisto, and Adriano Valenzano. Automatic testing equivalence ver-

Dashofy:2005:CAD

Emmeric:2008:IRD

ElKholy:2014:CCR

Erwig:2005:SRS

Egyed:2002:AAC

Ehsan:2021:ESD

El-Hokayem:2020:MDS
[EHF20] Antoine El-Hokayem and Yliès Falcone. On the monitoring of decentralized specifications: Semantics, properties, analysis,

**Ebnenasir:2011:FSD**


**Ellis:2019:RFD**


**Engels:1992:BIS**


**Estublier:2005:ISE**


**Emam:2015:TCP**


**Emam:2018:IEP**

S. S. Emam and J. Miller. Inferring extended probabilistic finite-state automaton models from software executions. *ACM
REFERENCES


REFERENCES


REFERENCES


REFERENCES

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

Forgacs:1994:DIF


Felder:2002:FDN


Frias:2005:RAS


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

Frias:2007:EAD


Fisher:2006:IA


Feldman:1993:SRS

REFERENCES


REFERENCES


REFERENCES


Gargantini:2001:ADR

Ghezzi:2003:E

Griswold:1993:AAP

Gay:2016:EPM

Goel:2009:IPC

Gupta:1997:HSI
Gong:2021:TDG

Guerriero:2021:SMD

Gao:2020:GQT

Gao:2021:TQS
Gao:2021:HAF


Gao:2022:AAR


Gervasi:2005:RAI


Hemmati:2013:ASM


Holmes:2020:URL

REFERENCES


[Henninger:1997:EAC] Scott Henninger. An evolutionary approach to constructing effective software reuse repositories. ACM Transac-
REFERENCES


REFERENCES

Hierons:2006:ACC


Hierons:2009:VFT


Hierons:2014:CCD


Heitmeyer:1996:ACC


Harman:2014:ESS


Hierons:2016:SOP


Hierons:2020:MOT

[HLL+20] Robert M. Hierons, Miqing Li, Xiaohui Liu, Jose Antonio Parejo, Sergio Segura, and Xin Yao. Many-objective test suite generation for software product lines. *ACM Transactions on Software Engineer-
REFERENCES


Hunter:1998:MIS


Haas:2020:SAA


Harman:2015:ISI


Henkel:2008:DDA


Hunt:1998:ADA

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).

REFERENCES


Jackson:2002:ALO


Jezequel:1999:RVC


Jennings:2012:TPA


Jalote:2008:PRR


Jin:2015:ASR


Jaccheri:1998:ESP

REFERENCES


**Kastner:2012:TCA**


**Kapoor:2007:TCF**


**Karanikolas:2017:EEI**


**Krishnamurthi:2007:FIA**


**Kiezun:2012:HSW**


**Kiper:1992:STR**

Kim:2022:PMA


Kaiser:1993:PDI


Kramer:2004:CCM


Keidar:2002:IBT


Keller:2022:WYS


Kang:2021:ASM

Klint:1993:MEG


Klint:2005:TED


Ko:2010:EAW


Kapur:2020:DES


Kapur:2022:OEE


REFERENCES


Liao:2022:ESI


Lin:2022:XTC


Lyu:2022:TCI


Le:2013:MDF


Louridas:2008:PLS

Li:2019:UAJ


Linares-Vasquez:2018:MOO


Lopes:2003:HOA


Lin:2022:CA


Liu:2022:CSC


Lau:2005:EFC


Lin: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).

Masri:2014:PCC


Meyers:2022:EPT


Meyers:2007:ESS


Mahmoud:2015:ESR


Miranda:2020:TR


McMinn:2009:EEN


Mills:2017:PQQ

Chris Mills, Gabriele Bavota, Sonia Haiduc, Rocco Oliveto, Andrian Marcus, and Andrea De Lucia. Predicting query quality for applications of text

**Mohagheghi:2008:EIS**


**Memon:2008:ARE**


**Martinez-Fernandez:2022:SEA**


**Mockus:2002:TCS**


**Mattsson:2012:AMA**


**Mills:2000:KBM**

Miles:2011:PMD


Marin:2013:UFS


Masso:2022:CTS


Mechtaev:2018:TEA


Maoz:2011:CMS


Menendez:2021:DFT


Mkaouer:2015:MOS

Wiem Mkaouer, Marouane Kessentini, Adnan Shaout,
REFERENCES


[MNGL98] Gail C. Murphy, David Notkin,
<table>
<thead>
<tr>
<th>References</th>
<th>Paper Title</th>
</tr>
</thead>
</table>


REFERENCES


Machado:2016:CDD


McCann:1999:MMI


Moser:1997:GED


Milanov:2005:POS


Medvidovic:2002:MSA

REFERENCES


REFERENCES


<table>
<thead>
<tr>
<th>Reference</th>
<th>Authors</th>
<th>Title</th>
<th>Journal</th>
<th>Volume</th>
<th>Issue</th>
<th>Year</th>
<th>Citation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marculescu:2022:FFR</td>
<td>Bogdan Marculescu, Man Zhang, and Andrea Arcuri</td>
<td>On the faults found in REST APIs by automated test generation</td>
<td>ACM Transactions on Software Engineering and Methodology</td>
<td>31(3)</td>
<td>41:1–41:43</td>
<td>2022</td>
<td>10.1145/3491038</td>
</tr>
</tbody>
</table>
REFERENCES

311X (print), 1557-7392 (electronic).

Naish:2011:MSB


Notkin:2007:Ea


Notkin:2007:Eb


Notkin:2007:Ec


Notkin:2008:Ea


Notkin:2008:Eb


Notkin:2009:E


Notkin:2010:E


Notkin:2012:E

REFERENCES


[ODV+09] Chun Ouyang, Marlon Dumas, Wil M. P. Van Der Aalst, Arthur H. M. Ter Hofstede, and Jan Mendling. From business process models to process-oriented software systems. ACM
REFERENCES


REFERENCES

Olander:1992:ISA

Ohrndorf:2021:HBM

Orso:2004:CDD

Ostro:1999:CRD

Ponge:2010:AA


**Paige:2007:MBM**


**Pavese:2016:LME**


**Petrenko:1997:CRT**


**Pezze:2019:Ea**


**Pezze:2019:Eb**


**Pezze:2019:Ec**


**Pezze:2019:EIE**

Pezze:2020:Ea


Pezze:2020:Eb


Pezze:2021:E


Pezze:2022:ERP


Peshyvan:2012:CLU


Podgun:2020:FGC


Payton:2010:SSA


[PP93] Andy Podgurski and Lynn Pierce. Retrieving reusable software by sampling behav-

Parisi-Presicce:1994:ATC


Picco:2001:RAC


Porter:1998:USV

REFERENCES


Pantiuchina:2020:WDR


Qi:2013:PEB


Qi:2012:DAD


Rothermel:2001:MTS


Radoi:2015:ETS

REFERENCES

Reiss:1999:DE


Rothermel:2004:TSC


Rigby:2014:PRO


Roychoudhury:2012:SMS


Rothermel:1997:SER


Reuling:2019:AWP

REFERENCES

[Robillard:2003:SAS]

[Robillard:2007:RCS]

[Robillard:2008:TAS]

[Romdhana:2022:DRL]

[Riesco:2018:PII]

[Roman:1997:MUR]

[Rosenblum:2013:ELF]
REFERENCES


REFERENCES


[Roshandel:2004:MSM] Roshanak Roshandel, André Van Der Hoek, Marija Mikic-

**Razzaq:2019:SEE**


**RXX+19**


**Smaragdakis:2002:MLO**


**Stol:2014:KFA**


**Snook:2006:UBF**


**Sobhy:2021:ESA**

REFERENCES

Sinnig:2013:UCT

Stol:2018:ASE

Stolee:2014:SSS

Sadeghi:2017:ECA

Sherman:2015:DTB

Sistla:2000:SSB

Scanniello:2014:IUA
Giuseppe Scanniello, Carmine Gravino, Marcela Genero, Jose’ A. Cruz-Lemus, and Gen-
REFERENCES


REFERENCES

Sinha:2001:ICD

[SHR01]

Singh:2010:SWE

[Sin10]

Sahin:2014:CSD

[SKBD14]

Sinha:2001:ICD

Sahin:2014:CSD

Sinha:2001:ICD


Sun:2021:TRE

Sun:2013:MVH

Strecker:2012:ADC
Jaymie Strecker and Atif M. Memon. Accounting for defect characteristics in evaluations of

Siegel:2008:CSE


Sobhy:2022:CPS


Scalabrino:2021:ASB


Schneider:1992:ESF


Song:2019:SEI


Sullivan:1992:REI

REFERENCES


[SAP05] Ian Sommerville and Jane Ransom. An empirical study of industrial requirements engineering process assessment and improvement. ACM Transactions
REFERENCES


[STS+18] Abhishek Sharma, Yuan Tian, Agus Sulistya, Dinusha Wi-

**Sim:2011:HWD**


**Safdar:2021:RFC**


**Sheng:2019:TPA**


**Tramontana:2019:DEO**


**Tichy:1995:AR**

REFERENCES

Trambell:1992:APC


Taymouri:2020:CAW


Traini:2022:HSR


Tian:2019:DTC


Tilevich:2011:EEP

[TG11] Eli Tilevich and Sriram Gopal. Expressive and extensible parameter passing for distributed object systems. *ACM Trans-
Thiran:2006:WBE


Tiwana:2008:ICD


Tsuchiya:2002:FCE


Tian:2022:PPC


Tappenden:2014:ACC


Tateishi:2013:PIS


Tilevich:2009:JOE

Eli Tilevich and Yannis Smaragdakis. J-Orchestra: Enhancing

**Troya:2018:SBF**


**Tao:2021:SDM**


**Tufano:2019:ESL**


**Trinkenreich:2022:WPO**


**Tyszberowicz:1992:OPL**


**Tan:2009:CDM**

[TZZ09] Hee Beng Kuan Tan, Yuan

Unterkalmsteiner:2014:TRE


Uddin:2022:ESE


Ucchitel:2004:IES


Vandehei:2021:LDL


Nalini Venkatasubramanian, Carolyn Talcott, and Gul A. Agha. A formal model for reasoning about adaptive QoS-enabled middleware. ACM Transactions on Software Engineering and Methodology, 13(1):86–147, January 2004. CODEN ATSMER. ISSN 1049-
REFERENCES

Wallach:2000:SSM


Walkinshaw:2013:ACS


Wang:2020:KDI


Wang:2020:KDI


Watson:2022:SLR


Weyuker:1996:UF

Elaine J. Weyuker. Using failure cost information for testing and reliability assessment. *ACM Transactions on Soft-
REFERENCES


Wagner:2019:SQR


Worsch:2013:EQF


Wassermann:2007:SCD


Whittle:2010:SHS

REFERENCES

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


REFERENCES


REFERENCES

Xu:2022:MSC

Xue:2020:MOI

Xie:2007:DCA

Xie:2008:UPS

Xu:2014:SRB
Xu:2013:PML


Xu:2022:ICG


Xiong:2022:LFS


Xiang:2018:CSP


Yu:2020:SCR


Yuan:2020:TBE


Yue:2013:FTU

Tao Yue, Lionel C. Briand, and Yvan Labiche. Facilitating the transition from use case models to analysis models: Approach and experiments. *ACM Transactions on Software Engineering and Methodology*, 22(1):
5:1–5:??, February 2013. CODEN ATSMER. ISSN 1049-331X (print), 1557-7392 (electronic).


REFERENCES

Yang:2022:DDR


Zhang:2022:AHS


Zave:2004:ATT


Zeil:1992:DLE


Zhu:2013:ADP


Zhou:2022:PTP


Zheng:2018:MAI


**Zhang:2014:ATV**


**Zhang:2022:TRD**


**Zhang:2018:ESM**


**Zhang:2020:PPA**


**Zave:1993:CC**


**Zave:1997:FDC**

Pamela Zave and Michael


Abdullah A. Zarir, Gustavo A. Oliva, Zhen M. (Jack) Jiang, and Ahmed E. Hassan. Devel-
Zeller:1997:UVT
Andreas Zeller and Gregor Snelting. Unified versioning through feature logic.

Zhang:2010:RAE
Wei Zhang, Chong Sun, Junghee Lim, Shan Lu, and Thomas Reps. Detecting crash-triggering concurrency bugs through an effect-oriented approach.

Zhou:2022:SAI
 REFERENCES


[Zou:2022:BSP] 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**


**Zhou:2020:ARD**


**Zou:2021:IDL**


**Zhang:2021:UWR**

REFERENCES