David LO

School of Computing and Information Systems
Singapore Management University (SMU)
80 Stamford Road
Singapore 178902

Email: davidlo@smu.edu.sg
Office Phone: (+65) 68280599

Education

PhD, National University of Singapore, Singapore, 2008

Bachelor of Engineering, Nanyang Technological University, Singapore, 2004

Academic Appointments

OUB Chair Professor of Computer Science, School of Computing and Information Systems, SMU, Jul 2023 - Present

Professor of Computer Science, School of Computing and Information Systems, SMU, Apr 2021 - Jun 2023

Professor of Information Systems, School of Computing and Information Systems, SMU, Jan 2021 - Mar 2021

Associate Professor of Information Systems, School of Computing and Information Systems, SMU, Jul 2016 - Dec 2020

Assistant Professor of Information Systems, School of Computing and Information Systems, SMU, Jan 2009 - Jun 2016

Lecturer of Information Systems, School of Computing and Information Systems, SMU, May 2008 - Dec 2008

Academic Administrative Positions

Co-Director, Centre for Research for Intelligent Software Engineering (RISE), Centre for Research on Intelligent Software Engineering, SMU, Apr 2025 - Present

Director, Centre for Research for Intelligent Software Engineering (RISE), Centre for Research on Intelligent Software Engineering, SMU, Apr 2023 - Mar 2025

Director, Information Systems & Technology Cluster, School of Computing and Information Systems, SMU, Jul 2021 - Present

Deputy Director, Research Lab for Intelligent Software Engineering, Centre for Research on Intelligent Software Engineering, SMU, Apr 2021 - Mar 2023

Director, Research Lab for Intelligent Software Engineering, Centre for Research on Intelligent Software Engineering, SMU, Apr 2020 - Mar 2021

Member (School of Information Systems), Institutional Review Board, SMU Institutional Review Board, SMU, Nov 2018 - Dec 2020

Other Positions and Affiliations

Visiting Researcher, Microsoft Research, Microsoft, United States of America, Jul 2014 - Sep 2014

Awards and Honors

MSR Foundational Contribution Award, ACM/IEEE International Conference on Mining Software Repositories, 2025

Most Influential Paper Award, 25th IEEE International Conference on Software Quality, Reliability and Security (QRS 2025), 2025

ACM SIGSOFT Distinguished Paper Award, 33rd ACM International Conference on the Foundations of Software Engineering (FSE 2025), 2025

2024 IEEE Transactions on Software Engineering Best Paper Award, IEEE Computer Society, 2025

ACM SIGSOFT Distinguished Paper Award, 40th ACM/IEEE International Conference on Automated Software Engineering (ASE 2025), 2025

Test-of-Time Award, 33rd ACM International Conference on the Foundations of Software Engineering (FSE 2025), 2025

ACM SIGSOFT Distinguished Paper Awards (x2), 46th IEEE/ACM International Conference on Software Engineering (ICSE 2024), 2024

IEEE TCSE Distinguished Paper Award, 31st IEEE International Conference on Software Analysis, Evolution and Reengineering (SANER 2024), 2024

ACM Distinguished Speaker (2024-2027), Association of Computing Machinery (ACM), 2024

NUS SoC Distinguished Computing Alumni Award , School of Computing, National University of Singapore, 2024

Best Student Paper Award, 40th IEEE International Conference on Software Maintenance and Evolution (ICSME 2024), 2024

ACM SIGSOFT Distinguished Paper Award, 33rd ACM SIGSOFT International Symposium on Software Testing and Analysis (ISSTA 2024), 2024

Fellow of Association of Computing Machinery (ACM Fellow), Association of Computing Machinery (ACM), 2024

Most Influential Paper Nominations , 34th IEEE International Symposium on Software Reliability Engineering (ISSRE 2023) , 2023

Most Influential Paper Nominations (x3), 30th IEEE International Conference on Software Analysis, Evolution and Reengineering (SANER 2023), 2023

Hot and Highly Cited Paper recognition given to an IEEE Transactions on Software Engineering (TSE 2021) paper titled "Smart Contract Development: Challenges and Opportunities", Web of Science, 2023

NRF Investigatorship, National Research Foundation, 2023

Most Influential Paper Nomination (x2), 39th IEEE International Conference on Software Maintenance and Evolution (ICSME 2023), 2023

Test-of-Time Award, 33rd IEEE International Symposium on Software Reliability Engineering (ISSRE 2022), 2022

Distinguished Paper Award Honorable Mention, 38th Annual Computer Security Applications Conference (ACSAC 2022), 2022

Nominated for ACM SIGSOFT Distinguished Paper, 37th ACM/IEEE International Conference on Automated Software Engineering (ASE 2022), 2022

Most Influential Paper Award, 29th IEEE International Conference on Software Analysis, Evolution and Reengineering (SANER 2022), 2022

Shortlisted for Most Influential Paper Award (x2), 29th IEEE International Conference on Software Analysis, Evolution and Reengineering (SANER 2022), 2022

Nominated for ACM SIGSOFT Distinguished Paper (x2), 44th ACM/IEEE International Conference on Software Engineering (ICSE 2022), 2022

Excellent Teacher Award, Singapore Management University, 2022

Best Paper Runner Up, IEEE Transactions of Software Engineering (2021), IEEE Computer Society, 2022

Fellow of Institute of Electrical and Electronics Engineers (IEEE Fellow), Institute of Electrical and Electronics Engineers (IEEE), 2022

IEEE TCSE Distinguished Service Award, Institute of Electrical and Electronics Engineers (IEEE), 2021

IEEE TCSE Distinguished Paper Award (Best Paper), 39th IEEE International Conference on Software Maintenance and Evolution (ICSME 2023), 2021

Fellow of Automated Software Engineering (ASE Fellow), Automated Software Engineering (ASE), 2021

ACM SIGSOFT Distinguished Paper Award, 17th ACM/IEEE International Conference on Mining Software Repositories (MSR 2020), 2020

Shortlisted for Most Influential Paper Award, 27th IEEE International Conference on Software Analysis, Evolution and Reengineering (SANER), 2020

Nominated for Excellent Teacher Award (1 out of 7 nominees), Singapore Management University, 2019

ACM SIGSOFT Distinguished Paper Award, 34th ACM/IEEE International Conference on Automated Software Engineering (ASE 2019), 2019

Best Tool Demo Paper Award, 27th ACM Joint European Software Engineering Conference and Symposium on the Foundations of Software Engineering (ESEC/FSE), 2019

ACM Distinguished Member for Scientific Contribution to Computing, Association for Computing Machinery (ACM), 2019

Lee Kuan Yew Fellowship, Singapore Management University, 2019

ACM SIGSOFT Distinguished Paper Award, 33rd ACM/IEEE International Conference on Automated Software Engineering (ASE 2018), 2018

Distinguished Program Committee Member, Twenty-Seventh International Joint Conference on Artificial Intelligence (IJCAI 2018), 2018

ACM SIGSOFT Distinguished Paper Award, 26th ACM/IEEE Conference on Program Comprehension (ICPC 2018), 2018

Lee Kong Chian Fellowship, Singapore Management University, 2018

Highly Commended Paper Award, 12th ACM/IEEE International Symposium on Empirical Software Engineering and Measurement (ESEM 2018), 2018

Best Early Research Achievement (ERA) Paper, 24th IEEE International Conference on Software Analysis, Evolution, and Reengineering (SANER 2017), 2017

Outstanding Reviewer Award, Information and Software Technology journal, 2017

Nominated for Distinguished Paper Awards (2 Papers), 33rd IEEE International Conference on Software Maintenance and Evolution (ICSME 2017), 2017

Nominated for Best Paper Award, 13th ACM/IEEE International Conference on Mining Software Repositories (MSR), ACM/IEEE International Conference, 2016

Nominated for Best Paper Award, 32nd IEEE International Conference on Software Maintenance and Evolution (ICSME), IEEE International, 2016

Outstanding Reviewer Award, Information and Software Technology journal, 2016

Distinguished Program Committee Member, 32nd IEEE/ACM International Conference on Automated Software Engineering (ASE 2017), 2016

Shortlisted for Most Influential Paper Award, 23rd IEEE International Conference on Software Analysis, Evolution and Reengineering (SANER), 2016

Most Active Reviewer Award, Empirical Software Engineering journal, 2015

ACM SIGSOFT Distinguished Paper Award, 10th Joint Meeting of the European Software Engineering Conference and the ACM SIGSOFT Foundations on Software Engineering (ESEC-FSE), 2015

Distinguished Reviewer Award, 22nd IEEE International Conference on Software Analysis, Evolution and Reengineering (SANER), 2015

Nominated for Best Paper Award, 23rd IEEE International Conference on Program Comprehension (ICPC), 2015

Best Student Paper Award, 19th International Conference on Engineering of Complex Computer Systems (ICECCS), 2014

Most Promising Idea Award, 22nd International Conference on Program Comprehension (ICPC), 2014

Nominated for Best Paper Awards (2 Papers), 29th IEEE International Conference on Software Maintenance (ICSM), 2013

Distinguished Reviewer Award, 20th Working Conference on Reverse Engineering (WCRE), 2013

Nominated for SMU Most Promising Teacher Award (1 of 7 nominees), 2012, 2011

ACM SIGSOFT Distinguished Paper Award, 27th IEEE/ACM International Conference on Automated Software Engineering (ASE), 2012

Nominated for Distinguished Paper Award, 18th International Conference on Software Testing and Analysis (ISSTA), 2009

Lee Foundation Fellow for Research Excellence, 2009

2nd Position, ACM SIGPLAN Programming Language Design and Implementation (PLDI) Student Research Competition, 2007

RESEARCH

Research Interests

Software Analytics
Software Engineering
Artificial Intelligence
Cybersecurity

Publications

Journal Articles [Refereed]

VERCATION: Precise vulnerable open-source software version identification based on static analysis and LLM, by CHENG, Yiran; ZHANG, Ting; SHAR, Lwin Khin; YANG, Shouguo; DONG, Chaopeng; LO, David; Lv, Shichao; SHI, Zhiqiang; SUN, Limin. (2025). *IEEE Transactions on Software Engineering,* 1-19. https://doi.org/10.1109/TSE.2025.3599581 (Advance Online)

LLM-based multi-agent systems for software engineering: Literature review, vision and the road ahead, by HE, Junda; TREUDE, Christoph; LO, David. (2025). *ACM Transactions on Software Engineering and Methodology, 34* (5), 1-30. https://doi.org/10.1145/3712003 (Published)

Large Language Model for vulnerability detection and repair: Literature review and the road ahead, by ZHOU, Xin; CAO, Sicong; SUN, Xiaobing; LO, David. (2025). *ACM Transactions on Software Engineering and Methodology, 34* (5), 1-31. https://doi.org/10.1145/3708522 (Published)

Enriching automatic test case generation by extracting relevant test inputs from bug reports, by Ouedraogo, Wendkuuni C.; Plein, Laura; Kabore, Kader; Habib ,Andrew; Klein, Jacques; Lo, David; Bissyande, Tegawende F.. (2025). *Empirical Software Engineering, 30* (3), 1-60. https://doi.org/10.1007/s10664-025-10635-z (Published)

Toward better comprehension of breaking changes in the NPM ecosystem, by KONG, Dezhen; LIU, Jiakun; BAO, Lingfeng; LO, David. (2025). *ACM Transactions on Software Engineering and Methodology, 34* (4), 1-23. https://doi.org/10.1145/3702991 (Published)

Prioritizing speech test cases, by Yang Zhou, Shi Jieke, Asyrofi Muhammad Hilmi, Xu Bowen, Zhou Xin, Han Donggyun, Lo David. (2025). *ACM Transactions on Software Engineering and Methodology, 34* (4), 1-27. https://doi.org/10.1145/3707450 (Published)

Revisiting sentiment analysis for software engineering in the era of large language models, by ZHANG, Ting, IRSAN, Ivana Clairine; THUNG, Ferdian; LO, David. (2025). *ACM Transactions on Software Engineering and Methodology, 34* (3), 1-30. https://doi.org/10.1145/36970 (Published)

Bridging expert knowledge with deep learning techniques for just-in-time defect prediction, by ZHOU, Xin; HAN, Donggyun; LO, David. (2025). *Empirical Software Engineering, 30* (1), 1-44. https://doi.org/10.1007/s10664-024-10591-0 (Published)

PTM4Tag+: Tag recommendation of stack overflow posts with pre-trained models, by HE, Junda; XU, Bowen; YANG, Zhou; HAN, DongGyun; YANG, Chengran; LIU, Jiakun; ZHAO, Zhipeng; LO, David. (2025). *Empirical Software Engineering, 30* (1), 1-45. https://doi.org/10.1007/s10664-024-10576-z (Published)

Neuron semantic-guided test generation for deep neural networks fuzzing, by HUANG, Li; SUN, Weifeng; YAN, Meng; LIU, Zhongxin; LEI, Yan; LO, David. (2025). *ACM Transactions on Software Engineering and Methodology, 34* (1), 1-38. https://doi.org/10.1145/3688835 (Published)

Zero-shot cross-domain code search without fine-tuning, by LIANG, Keyu; LIU, Zhongxin; LIU, Chao; WAN, Zhiyuan; LO, David; YANG, Xiaohu. (2025). *Proceedings of the ACM on Software Engineering, 2* (FSE), 1937-1959. https://doi.org/10.1145/3729357 (Published)

Gotcha ! This model uses my code ! Evaluating membership leakage risks in code models, by YANG, Zhou; ZHAO, Zhipeng; WANG, Chenyu; SHI, Jieke; KIM, Dongsum; HAN, Donggyun; LO, David. (2024). *IEEE Transactions on Software Engineering, 50* (12), 3290-3306. https://doi.org/10.1109/TSE.2024.3482719 (Published)

Towards more precise coincidental correctness detection with Deep Semantic Learning, by XIE, Huan; LEI, Yan; YAN, Meng; LI, Shanshan; MAO, Xiaoguang; YU, Yue; LO, David. (2024). *IEEE Transactions on Software Engineering, 50* (12), 3265-3289. https://doi.org/10.1109/TSE.2024.3481893 (Published)

Large language models for software engineering: A systematic literature review, by HOU, Xinyi; ZHAO, Yanjie; LIU, Yue; YANG, Zhou; WANG, Kailong; LI, Li; LUO, Xiapu; LO, David; GRUNDY, John; WANG, Haoyu. (2024). *ACM Transactions on Software Engineering and Methodology, 33* (8), 1-79. https://doi.org/10.1145/36959 (Published)

Angels or demons: Investigating and detecting decentralized financial traps on ethereum smart contracts, by CHEN, Jiachi; HU, Jiang; XIA, Xin; LO, David; GRUNDY, John; GAO, Zhipeng; CHEN, Ting. (2024). *Automated Software Engineering, 31* (2), 1-33. https://doi.org/10.1007/s10515-024-00459-4 (Published)

Just-In-Time TODO-missed commits detection, by WANG, Haoye; GAO, Zhipeng; HU, Xing; LO, David; GRUNDY, John; WANG, Xinyu. (2024). *IEEE Transactions on Software Engineering, 50* (11), 2732-2752.

https://doi.org/10.1109/TSE.2024.3405005 (Published)

Leveraging Large Language Model for automatic patch correctness assessment, by ZHOU, Xin; XU, Bowen; KIM, Kisub; HAN, DongGyun; NGUYEN, Hung Huu; LE-CONG, Thanh; HE, Junda; LE, Bach; LO, David. (2024). *IEEE Transactions on Software Engineering, 50* (11), 2865-2883. https://doi.org/10.1109/TSE.2024.3452252 (Published)

Meta-learning for multi-family Android malware classification, by LI, Yao; YUAN, Dawei; ZHANG, Tao; CAI, Haipeng; LO, David; GAO, Cuiyun; LUO, Xiapu; JIANG, He. (2024). *ACM Transactions on Software Engineering and Methodology, 33* (7), 1-27. https://doi.org/10.1145/3664806 (Published)

Evaluating SZZ implementations : An empirical study on the Linux Kernel, by LYU, Yunbo; KANG, Hong Jin; WIDYASARI, Ratnadira; LAWALL, Julia; LO, David. (2024). *IEEE Transactions on Software Engineering, 50* (9), 2219-2239. https://doi.org/10.1109/TSE.2024.3406718 (Published)

Refining ChatGPT-generated code: Characterizing and mitigating code quality issues, by LIU, Yue; LE-CONG, Thanh; WIDYASARI, Ratnadira, TANTITHAMTHAVORN, Chakkrit, LI, Li, LE, Xuan-Bach Dinh; LO, David. (2024). *ACM Transactions on Software Engineering and Methodology, 33* (5), 1-26. https://doi.org/10.1145/3643674 (Published)

DAppSCAN: Building large-scale datasets for smart contract weaknesses in DApp Projects, by ZHENG, Zibin; SU, Jianzhong; CHEN, Jiachi; LO, David; ZHONG, Zhijie; YE, Mingxi. (2024). *IEEE Transactions on Software Engineering, 50* (6), 1360-1373. https://doi.org/10.1109/TSE.2024.3383422 (Published)

Analyzing and revivifying function signature inference using deep learning, by LIN, Yan; SINGHAL, Trisha; GAO, Debin; LO, David. (2024). *Empirical Software Engineering, 29* (69), 1-48. https://doi.org/10.1007/s10664-024-10453-9 (Published)

Analyzing and revivifying function signature inference using deep learning, by LIN, Yan; SINGHAL, Trisha; GAO, Debin; LO, David. (2024). *Empirical Software Engineering, 29* (3), 1-45. https://doi.org/10.1007/s10664-024-10453-9 (Published)

Range specification bug detection in flight control systems through fuzzing, by HAN, Ruidong; MA, Siqi; LI, Juanru; NEPAL, Surya; LO, David; MA, Zhuo; MA, Jianfeng . (2024). *IEEE Transactions on Software Engineering, 50* (3), 461-473. https://doi.org/10.1109/TSE.2024.3354739 (Published)

Representation learning for Stack Overflow posts: How far are we?, by HE, Junda; ZHOU, Xin; XU, Bowen; ZHANG, Ting; KIM, Kisub; YANG, Zhou; THUNG, Ferdian; IRSAN, Ivana Clairine; LO, David. (2024). *ACM Transactions on Software Engineering and Methodology, 33* (3), 1-24. https://doi.org/10.1145/3635711 (Published)

Stealthy backdoor attack for code models, by YANG, Zhou; XU, Bowen; ZHANG, Jie M.; KANG, Hong Jin; SHI, Jieke; HE, Junda; LO, David. (2024). *IEEE Transactions on Software Engineering, 50* (4), 1-21. https://doi.org/10.1109/TSE.2024.3361661 (Advance Online)

Understanding newcomers' onboarding process in deep learning projects, by HAN, Junxiao; ZHANG, Jiahao; LO, David; XIA, Xin; DENG, Shuigang; WU, Minghui. (2024). *IEEE Transactions on Software Engineering, 50* (3), 443-460. https://doi.org/10.1109/TSE.2024.3353297 (Published)

Federated learning for software engineering: A case study of code clone detection and defect prediction, by YANG, Yanming; HU, Xing; GAO, Zhipeng; CHEN, Jinfu; NI, Chao; XIA, Xin; LO, David. (2024). *IEEE Transactions on Software Engineering, 50* (2), 1-26. https://doi.org/10.1109/TSE.2023.3347898 (Advance Online)

A closer look at the security risks in the Rust ecosystem, by ZHENG, Xiaoye; WAN, Zhiyuan; ZHANG, Yun; CHANG, Rui; LO, David. (2023). *ACM Transactions on Software Engineering and Methodology, 33* (2), 1-34. https://doi.org/10.1145/3624738 (Published)

Robust test selection for deep neural networks, by SUN, Weifeng; YAN, Meng; LIU, Zhongxin; LO, David. (2023). *IEEE Transactions on Software Engineering, 49* (12), 5250-5278. https://doi.org/0.1109/TSE.2023.3330982 (Published)

On the sustainability of deep learning projects: Maintainers' perspective, by HAN, Junxiao; LIU, Jiakun; LO, David; ZHI, Chen; CHEN, Yishan; DENG, Shuiguang. (2023). *Journal of Software: Evolution and Process, 36* (7), 1-20. https://doi.org/10.1002/smr.2645 (Advance Online)

Experimental comparison of features, analyses, and classifiers for Android malware detection, by SHAR,

Lwin Khin; DEMISSIE, Biniam Fisseha; CECCATO, Mariano; YAN, Naing Tun; LO, David; JIANG, Lingxiao; BIENERT, Christoph. (2023). *Empirical Software Engineering, 28* (6), 1-39. https://doi.org/10.1007/s10664-023-10375-y (Published)

DexBERT: Effective, task-agnostic and fine-grained representation learning of Android bytecode, by SUN, Tiezhu; ALLIX, Kevin; KIM, Kisub; ZHOU, Xin; KIM, Dongsun; LO, David; BISSYANDE, Tegawendé F.; KLEIN, Jacques. (2023). *IEEE Transactions on Software Engineering, 49* (10), 4691-4706. https://doi.org/10.1109/TSE.2023.3310874 (Published)

Revisiting the Identification of the Co-evolution of Production and Test Code, by SUN, Weifeng; YAN, Meng; LIU, Zhongxin; XIA, Xin; LEI, Yan; LO, David. (2023). *ACM Transactions on Software Engineering and Methodology, 32* (6), 1-37. https://doi.org/10.1145/3607183 (Published)

Multi-Granularity Detector for Vulnerability Fixes, by NGUYEN, Truong Giang; CONG; Thanh Le; KANG, Hong Jin; WIDYASARI, Ratnadira; YANG, Chengran; ZHAO, Zhipeng; XU, Bowen; ZHOU, Jiayuan; XIA, Xin; HASSAN, Ahmed E.; LE, Xuan-Bach Dinh; LO, David. (2023). *IEEE Transactions on Software Engineering, 49* (8), 4035-4057. https://doi.org/10.1109/TSE.2023.3281275 (Published)

Context-Aware Neural Fault Localization, by ZHANG, Zhuo, YAN, Lei; MAO, Xiaoguang; YAN, Meng; XIA, Xin; LO, David. (2023). *IEEE Transactions on Software Engineering, 49* (7), 3939-3954. https://doi.org/10.1109/TSE.2023.3279125 (Published)

Duplicate bug report detection: How far are we?, by ZHANG, Ting; HAN, DongGyun; VINAYAKARAO, Venkatesh; IRSAN, Ivana Clairine; XU, Bowen; THUNG, Ferdian; LO, David; JIANG, Lingxiao. (2023). *ACM Transactions on Software Engineering and Methodology, 32* (4), 1-32. https://doi.org/10.1145/3576042 (Published)

Web APIs: Features, issues, and expectations: A large-scale empirical study of Web APIs from two publicly accessible registries using Stack Overflow and a user survey, by ZHANG, Neng; ZOU, Ying; XIA, Xin; HUANG, Qiao; LO, David; LI, Shanping. (2023). *IEEE Transactions on Software Engineering, 49* (2), 498-528. https://doi.org/10.1109/TSE.2022.3154769 (Published)

I know what you are searching for: Code snippet recommendation from Stack Overflow posts, by GAO, Zhipeng; XIA, Xin; LO, David; GRUNDY, John C.; ZHANG, Xindong; XING, Zhenchang. (2023). *ACM Transactions on Software Engineering and Methodology, 32* (3), 1-42. https://doi.org/10.1145/3550150 (Published)

Invalidator: Automated Patch Correctness Assessment Via Semantic and Syntactic Reasoning, by LE-CONG, Tranh; LUONG, Duc Minh; LE, Xuan Bach D.; LO, David; TRAN, Nhat-Hoa; QUANG-HUY, Bui; HUYNH, Quyet-Thang. (2023). *IEEE Transactions on Software Engineering, 49* (6), https://doi.org/10.1109/TSE.2023.3255177 (Advance Online)

Just-In-Time Obsolete Comment Detection and Update, by LIU, Zhongxin; XIA, Xin; LO, David; YAN, Meng; LI, Shangping. (2023). *IEEE Transactions on Software Engineering, 49* (1), 1-23. https://doi.org/10.1109/TSE.2021.3138909 (Published)

How to Find Actionable Static Analysis Warnings: A Case Study With FindBugs, by YEDIDA, Rahul; KANG, Hong Jin; TU, Huy; YANG, Xueqi; LO, David; MENZIES, Tim. (2023). *IEEE Transactions on Software Engineering, 49* (4), 1-17. https://doi.org/10.1109/TSE.2023.3234206 (Advance Online)

BiasFinder: Metamorphic Test Generation to Uncover Bias for Sentiment Analysis Systems, by ASYROFI, Muhammad Hilmi; YANG, Zhou; YUSUF, Imam Nur Bani; KANG, Hong Jin; THUNG, Ferdian; LO, David. (2022). *IEEE Transactions on Software Engineering, 48* (12), 5087-5101. https://doi.org/10.1109/TSE.2021.3136169 (Published)

Deep Just-In-Time Defect Localization, by QIU, Fangcheng; GAO, Zhipeng; XIA, Xin; LO, David; GRUNDY, John; WANG, Xinyu. (2022). *IEEE Transactions on Software Engineering, 48* (12), 5068-5086. https://doi.org/10.1109/TSE.2021.3135875 (Published)

Opportunities and Challenges in Code Search Tools, by LIU, Chao; XIA, Xin; LO, David; GAO, Cuiying; YANG, Xiaohu; GRUNDY, John. (2022). *ACM Computing Surveys, 54* (9), 1-35. https://doi.org/10.1145/3480027 (Published)

Real world projects, real faults: evaluating spectrum based fault localization techniques on Python projects, by WIDYASARI, Ratnadira; PRANA, Gege Artha Azriadi; HARYONO, Stefanus Agus; WANG, Shaowei; LO, David. (2022). *Empirical Software Engineering, 27* (6), 1-50.

https://doi.org/10.1007/s10664-022-10189-4 (Published)

Legion: Massively Composing Rankers for Improved Bug Localization at Adobe, by JARMAN, Darryl; BERRY, Jeffrey; SMITH, Riley; THUNG, Ferdian; LO, David. (2022). *IEEE Transactions on Software Engineering, 48* (8), 3010-3024. https://doi.org/10.1109/TSE.2021.3075215 (Published)

On measuring network robustness for weighted networks, by ZHENG, Jianbing; GAO, Ming; LIM, Ee-Peng; LO, David; JIN, Cheqing; ZHOU, Aoying. (2022). *Knowledge and Information Systems, 64* (7), 1967-1996. https://doi.org/10.1007/s10115-022-01670-z (Accepted)

Data Quality Matters: A Case Study on Data Label Correctness for Security Bug Report Prediction, by WU, Xiaoxue; ZHENG, Wei; XIA, Xin; LO, David. (2021). *IEEE Transactions on Software Engineering, 48* (7), 2541-2556. https://doi.org/10.1109/TSE.2021.3063727 (Published)

Chatbot4QR: Interactive Query Refinement for Technical Question Retrieval, by ZHANG, Neng; HUANG, Qiao; XIA, Xin; ZOU, Ying; LO, Ding; XING, Zhenchang. (2022). *IEEE Transactions on Software Engineering, 48* (4), 1185-1211. https://doi.org/10.1109/TSE.2020.3016006 (Published)

AndroEvolve: automated Android API update with data flow analysis and variable denormalization, by HARYONO, Stefanus A.; THUNG, Ferdian; LO, David; JIANG, Lingxiao; LAWALL, Julia; KANG, Hong Jin; SERRANO, Lucas; MULLER, Gilles. (2022). *Empirical Software Engineering, 27* (3), 1-35. https://doi.org/10.1007/s10664-021-10096-0 (Published)

Post2Vec: Learning Distributed Representations of Stack Overflow Posts, by XU, Bowen; HOANG, Thong; SHARMA, Abhishek; YANG, Chengran; XIA, Xin; LO, David. (2022). *IEEE Transactions on Software Engineering, 48* (9), 3423-3441. https://doi.org/10.1109/TSE.2021.3093761 (Published)

Active Learning of Discriminative Subgraph Patterns for API Misuse Detection, by KANG, Hong Jin; LO, David. (2022). *IEEE Transactions on Software Engineering, 48* (8), 2761-2781. https://doi.org/10.1109/TSE.2021.3069978 (Published)

A Deep Dive into the Impact of COVID-19 on Software Development, by NETO, Paulo Anselmo da Mota Silveira; MANNAN, Umme Ayda; ALMEIDA, Eduardo Santana de; NAGAPPAN, Nachiappan; LO, David; KOCHHAR, Pavneet Singh; GAO, Cuiyun; AHMED, Iftekhar. (2022). *IEEE Transactions on Software Engineering, 48* (9), 3342-3360. https://doi.org/10.1109/TSE.2021.3088759 (Published)

Modeling Functional Similarity in Source Code With Graph-Based Siamese Networks, by MEHROTRA, Nikita; AGARWAL, Navdha; GUPTA, Piyush; ANAND, Saket; LO, David; PURANDARE, Rahul. (2022). *IEEE Transactions on Software Engineering, 48* (10), 3771-3789. https://doi.org/10.1109/TSE.2021.3105556 (Published)

Including everyone, everywhere: Understanding opportunities and challenges of geographic gender-inclusion in OSS, by PRANA, Gede Artha Azriadi; FORD, Denae; RASTOGI, Ayushi; LO, David; PURANDARE, Rahul; NAGAPPAN, Nachiappan. (2022). *IEEE Transactions on Software Engineering, 48* (9), 3394-3409. https://doi.org/10.1109/TSE.2021.3092813 (Published)

Broken External Links on Stack Overflow, by LIU, Jiakun; XIA, Xin; LO, David; ZHANG, Haoxiang; ZOU, Ying; HASSAN, Ahmed E.; LI, Shanping. (2022). *IEEE Transactions on Software Engineering, 48* (9), 3242-3267. https://doi.org/10.1109/TSE.2021.3086494 (Published)

Understanding in-app advertising issues based on large scale app review analysis, by GAO, Cuiyun; ZENG, Jichuan; LO, David; XIA, Xin; KING, Irwin; LYU, Michael R.. (2022). *Information and Software Technology, 142* 1-13. https://doi.org/10.1016/j.infsof.2021.106741 (Published)

Emerging App Issue Identification via Online Joint Sentiment-Topic Tracing, by GAO, Cuiyun; ZENG, Jichuan; WEN, Zhiyuan; LO, David; XIA, Xin; KING, Irwin; LYU, Michael R.. (2022). *IEEE Transactions on Software Engineering, 48* (8), 3025-3043. https://doi.org/10.1109/TSE.2021.3076179 (Published)

DefectChecker: Automated Smart Contract Defect Detection by Analyzing EVM Bytecode, by CHEN, Jiachi; XIA, Xin; LO, David; GRUNDY, John; LUO, Xiapu; CHEN, Ting. (2021). *IEEE Transactions on Software Engineering, 48* (7), 2189-2207. https://doi.org/10.1109/TSE.2021.3054928 (Published)

Correlating Automated and Human Evaluation of Code Documentation Generation Quality, by HU, Xing; CHEN, Qiuyuan; WANG, Haoye; XIA, Xin; LO, David; ZIMMERMANN, Thomas. (2022). *ACM Transactions on Software Engineering and Methodology, 31* (4), 2-28. https://doi.org/10.1145/3502853 (Published)

Just-In-Time Defect Prediction on JavaScript Projects: A Replication Study, by NI, Chao; XIA, Xin; LO, David;

YANG, Xiaohu; HASSAN, Ahmed E.. (2022). *ACM Transactions on Software Engineering and Methodology, 31* (4), 1-38. https://doi.org/10.1145/3508479 (Published)

On the Reproducibility and Replicability of Deep Learning in Software Engineering, by LIU, Chao; GAO, Cuiyun; XIA, Xin; LO, David; GRUNDY, John C.; YANG, Xiaohu. (2022). *ACM Transactions on Software Engineering and Methodology, 31* (1), 1-46. https://doi.org/10.1145/3477535 (Published)

An exploratory study on the repeatedly shared external links on Stack Overflow, by LIU, Jiakun; ZHANG, Haoxiang; XIA, Xin; LO, David; ZOU, Ying; HASSAN, Ahmed E.; LI, Shanping. (2022). *Empirical Software Engineering, 27* (1), -1. https://doi.org/10.1007/s10664-021-10028-y (Published)

A survey on deep learning for software engineering, by YANG, Yanming; XIA, Xin, LO, David; GRUNDY, John. (2022). *ACM Computing Surveys, 54* (10S), 1-73. https://doi.org/10.1145/3505243 (Published)

CodeMatcher: Searching Code Based on Sequential Semantics of Important Query Words, by LIU, Chao; XIA, Xin; LO, David; LIU, Zhiwei; HASSAN, Ahmed E.; LI, Shanping. (2022). *ACM Transactions on Software Engineering and Methodology, 31* (1), 1-37. https://doi.org/10.1145/3465403 (Published)

Predictive Models in Software Engineering: Challenges and Opportunities, by YANG, Yanming; XIA, Xin; LO, David; BI, Tingting; GRUNDY, John C.; YANG, Xiaohu. (2022). *ACM Transactions on Software Engineering and Methodology, 31* (3), 1-72. https://doi.org/10.1145/3503509 (Published)

Orchestration or Automation: Authentication Flaw Detection in Android Apps, by MA, Siqi; LI, Juanru; NEPAL, Surya; OSTRY, Diethelm; LO, David; JHA, Sanjay K.; DENG, Robert H.; BERTINO, Elisa. (2022). *IEEE Transactions on Dependable and Secure Computing, 19* (4), 2165-2178. https://doi.org/10.1109/TDSC.2021.3050188 (Published)

Just-In-Time Defect Identification and Localization: A Two-Phase Framework, by YAN, Meng; XIA, Xin; FAN, Yuanrui; HASSAN, Ahmed E.; LO, David; LI, Shanping. (2022). *IEEE Transactions on Software Engineering, 48* (1), 82-101. https://doi.org/10.1109/TSE.2020.2978819 (Published)

Defining smart contract defects on Ethereum, by CHEN, Jiachi; XIA, Xin; LO, David; GRUNDY, John; LUO, Xiapu; CHEN, Ting. (2022). *IEEE Transactions on Software Engineering, 48* (1), 327-345. https://doi.org/10.1109/TSE.2020.2989002 (Published)

Why do smart contracts self-destruct? Investigating the selfdestruct function on Ethereum, by CHEN, Jiachi; XIA, Xin; LO, David; GRUNDY, John C.. (2022). *ACM Transactions on Software Engineering and Methodology, 31* (2), 1-37. https://doi.org/10.1145/3488245 (Published)

Accessibility in Software Practice: A Practitioner's Perspective, by BI, Tingting; XIA, Xin; LO, David; GRUNDY, John C.; ZIMMERMANN, Thomas; FORD, Denae. (2022). *ACM Transactions on Software Engineering and Methodology, 31* (4), 1-26. https://doi.org/10.1145/3503508 (Published)

Automating App Review Response Generation Based on Contextual Knowledge, by GAO, Cuiyun; ZHOU, Wenjie; XIA, Xin; LO, David; XIE, Qi; LYU, Michael R.. (2022). *ACM Transactions on Software Engineering and Methodology, 31* (1), 1-36. https://doi.org/10.1145/3464969 (Published)

Checking smart contracts with structural code embedding, by GAO, Zhipeng; JIANG, Lingxiao; XIA, Xin; LO, David; GRUNDY, John. (2021). *IEEE Transactions on Software Engineering, 47* (12), 2874-2891. https://doi.org/10.1109/TSE.2020.2971482 (Published)

Where2Change: Change Request Localization for App Reviews, by ZHANG, Tao; CHEN, Jiachi; ZHAN, Xian; LUO, Xiapu; LO, David; JIANG, He. (2021). *IEEE Transactions on Software Engineering, 47* (11), 2590-2616. https://doi.org/10.1109/TSE.2019.2956941 (Published)

PatchNet: Hierarchical Deep Learning-Based Stable Patch Identification for the Linux Kernel, by HOANG, Thong Van-Duc; LAWALL, Julia; TIAN, Yuan; OENTARYO, Richard J.; LO, David. (2021). *IEEE Transactions on Software Engineering, 47* (11), 2471-2486. https://doi.org/10.1109/TSE.2019.2952614 (Published)

Smart Contract Development: Challenges and Opportunities, by ZOU, Weiqin; LO, David; KOCHHAR, Pavneet Singh; LE, Xuan-Bach D.; XIA, Xin; FENG, Yang; CHEN, Zhenyu; XU, Baowen. (2021). *IEEE Transactions on Software Engineering, 47* (10), 2084-2106. https://doi.org/10.1109/TSE.2019.2942301 (Published)

Which Variables Should I Log?, by LIU, Zhongxin; XIA, Xin; LO, David; XING, Zhenchang; HASSAN, Ahmed E.; LI, Shanping. (2021). *IEEE Transactions on Software Engineering, 47* (9), 2012-2031. https://doi.org/10.1109/TSE.2019.2941943 (Published)

Maintenance-related concerns for post-deployed Ethereum smart contract development: issues, techniques, and future challenges, by CHEN, Jiachi; XIA, Xin; LO, David; GRUNDY, John; YANG, Xiaohu. (2021). *Empirical Software Engineering, 26* (6), 1-44. https://doi.org/10.1007/s10664-021-10018-0 (Published)

The Impact of Mislabeled Changes by SZZ on Just-in-Time Defect Prediction, by FAN, Yuanrui; XIA, Xin; COSTA, Daniel A.; LO, David; HASSAN, Ahmed E.; LI, Shanping. (2021). *IEEE Transactions on Software Engineering, 47* (8), 1559-1586. https://doi.org/10.1109/TSE.2019.2929761 (Published)

Deep transfer bug localization, by HUO, Xuan; THUNG, Ferdian; LI, Ming; LO, David; SHI, Shu-Ting. (2021). *IEEE Transactions on Software Engineering, 47* (7), 1368-1380. https://doi.org/10.1109/TSE.2019.2920771 (Published)

A Large Scale Study of Long-Time Contributor Prediction for GitHub Projects, by BAO, Lingfeng; XIA, Xin; LO, David; MURPHY, Gail C.. (2021). *IEEE Transactions on Software Engineering, 47* (6), 1277-1298. https://doi.org/10.1109/TSE.2019.2918536 (Published)

Out of sight, out of mind? How vulnerable dependencies affect open-source projects, by PRANA, Gede Artha Azriadi; SHARMA, Abhishek; SHAR, Lwin Khin; FOO, Darius; SANTOSA, Andrew E.; SHARMA, Asankhaya; LO, David. (2021). *Empirical Software Engineering, 26* (4), 1-37. https://doi.org/10.1007/s10664-021-09959-3 (Published)

Do users care about ad's performance costs? Exploring the effects of the performance costs of in-app ads on user experience, by GAO, Cuiyun; ZENG, Jichuan; SARRO, Federica; LO, David; KING, Irwin; LYU, Michael R.. (2021). *Information and Software Technology, 132* 1-14. (Published)

Why My Code Summarization Model Does NotWork: Code Comment Improvement with Category Prediction, by CHEN, Qiuyuan; XIA, Xin; HU, Han; LO, David; LI, Shanping. (2021). *ACM Transactions on Software Engineering and Methodology, 30* (2), 1-29. https://doi.org/10.1145/3434280 (Published)

An exploratory study on the introduction and removal of different types of technical debt in deep learning frameworks, by LIU, Jiakun; HUANG, Qiao; XIA, Xin; SHIHAB, Emad; LO, David; LI, Shanping. (2021). *Empirical Software Engineering, 26* (16), 1-36. https://xin-xia.github.io/publication/emse202.pdf (Published)

Scalable online vetting of Android apps for measuring declared SDK versions and their consistency with API calls, by WU, Daoyuan; GAO, Debin; LO, David. (2021). *Empirical Software Engineering, 26* (1), https://doi.org/10.1007/s10664-020-09897-6 (Published)

Context-aware Retrieval-based Deep Commit Message Generation, by WANG, Haoye; XIA, Xin; LO, David; HE, Qiang; WANG, Xinyu; GRUNDY, John. (2021). *ACM Transactions on Software Engineering and Methodology, 30* (4), 1-29. (Published)

What makes a popular academic AI repository?, by FAN, Yuanrui; XIA, Xin; LO, David; HASSAN, Ahmed E.; LI, Shanping. (2021). *Empirical Software Engineering, 26* (1), 1-35. (Published)

Technical Q&A Site Answer Recommendation via Question Boosting, by GAO, Zhipeng; XIA, Xin; LO, David; GRUNDY, John. (2021). *ACM Transactions on Software Engineering and Methodology, 30* (1), 1-34. https://xin-xia.github.io/publication/tosem205.pdf (Published)

Adversarial Specification Mining, by KANG, Hong Jin; LO, David. (2021). *ACM Transactions on Software Engineering and Methodology, 30* (2), 1-40. (Published)

Deep-Learning-Based App Sensitive Behavior Surveillance for Android Powered Cyber-Physical Systems, by MA, Haoyu; TIAN, Jianwen; QIU, Kefan; LO, David; GAO, Debin; WU, Daoyuan; JIA, Chunfu; BAKER, Thar. (2021). *IEEE Transactions on Industrial Informatics, 17* (8), 1-10. https://doi.org/10.1109/TII.2020.3038745 (Published)

An Empirical Study of Release Note Production and Usage in Practice, by BI, Tingting; XIA, Xin; LO, David; GRUNDY, John; ZIMMERMANN, Thomas. (2022). *IEEE Transactions on Software Engineering, 48* (6), 1-19. https://doi.org/10.1109/TSE.2020.3038881 (Published)

Perceptions, Expectations, and Challenges in Defect Prediction, by WAN, Zhiyuan; XIA, Xin; HASSAN, Ahmed E.; LO, David; YIN, Jianwei.; YANG, Xiaohu. (2020). *IEEE Transactions on Software Engineering, 46* (11), 1241-1266. https://doi.org/10.1109/TSE.2018.2877678 (Published)

Automating Intention Mining, by HUANG, Qiao; XIA, Xin; LO, David; MURPHY, Gail C.. (2020). *IEEE Transactions on Software Engineering, 46* (10), 1098-1119. https://doi.org/10.1109/TSE.2018.2876340 (Published)

Generating Question Titles for Stack Overflow from Mined Code Snippets, by GAO, Zhipeng; XIA, Xin; GRUNDY, John; LO, David; LI, Yuan-Fang. (2020). *ACM Transactions on Software Engineering and Methodology, 29* (4), 1-37. https://doi.org/10.1145/3401026 (Published)

Smart Contract Repair, by YU, Xiao Liang; AL-BATAINEH, Omar; LO, David; ROYCHOUDHURY, Abhik. (2020). *ACM Transactions on Software Engineering and Methodology, 29* (4), 1-32. https://doi.org/10.1145/3402450 (Published)

How Practitioners Perceive Automated Bug Report Management Techniques, by ZOU, Weiqin; LO, David; CHEN, Zhenyu; XIA, Xin; FENG, Yang; XU, Baowen. (2020). *IEEE Transactions on Software Engineering, 46* (8), 836-862. https://doi.org/10.1109/TSE.2018.2870414 (Published)

psc2code: Denoising Code Extraction from Programming Screencasts, by BAO, Lingfeng; XING, Zhenchang; XIA, Xin; LO, David; WU, Minghui; YANG, Xiaohu. (2020). *ACM Transactions on Software Engineering and Methodology, 29* (3), 1-38. https://doi.org/10.1145/3392093 (Published)

Revisiting Supervised and Unsupervised Methods for Effort-Aware Cross-Project Defect Prediction, by NI, Chao; XIA, Xin; LO, David; CHEN, Xiang; GU, Qing. (2022). *IEEE Transactions on Software Engineering, 48* (3), 1-16. https://doi.org/10.1109/TSE.2020.3001739 (Published)

Chaff from the Wheat: Characterizing and Determining Valid Bug Reports, by FAN, Yuanrui; XIA, Xin; LO, David; HASSAN, Ahmed E.. (2020). *IEEE Transactions on Software Engineering, 46* (5), 495-525. https://doi.org/10.1109/TSE.2018.2864217 (Published)

Deep code comment generation with hybrid lexical and syntactical information, by HU, Xing; LI, Ge; XIA, Xin; LO, David; JIN, Zhi. (2020). *Empirical Software Engineering, 25* (3), 2179-2217. https://doi.org/10.1007/s10664-019-09730-9 (Published)

SIEVE: Helping developers sift wheat from chaff via cross-platform analysis, by SULISTYA, Agus; PRANA, Gede A. A. P.; LO, David; TREUDE, Christoph. (2020). *Empirical Software Engineering, 25* (1), 996-1030. https://doi.org/10.1007/s10664-019-09775-w (Published)

Why reinventing the wheels? An empirical study on library reuse and re-implementation, by XU, Bowen; AN, Le; THUNG, Ferdian; KHOMH, Foutse; LO, David. (2020). *Empirical Software Engineering, 25* (1), 755-789. https://doi.org/10.1007/s10664-019-09771-0 (Published)

Finding needles in a haystack: Leveraging co-change dependencies to recommend refactorings, by DE OLIVEIRA, Marcos César; FREITAS, Davi; BONIFACIO, Rodrigo; PINTO, Gustavo; LO, David. (2019). *Journal of Systems and Software, 158* 1-19. https://doi.org/10.1016/j.jss.2019.110420 (Published)

Automating Change-Level Self-Admitted Technical Debt Determination, by YAN, Meng; XIA, Xin; SHIHAB, Emad; LO, David; YIN, Jianwei; YANG, Xiaohu. (2019). *IEEE Transactions on Software Engineering, 45* (12), 1211-1229. https://doi.org/10.1109/TSE.2018.2831232 (Published)

AppMoD: Helping older adults manage mobile security with online social help, by WAN, Zhiyuan; BAO, Lingfeng; GAO, Debin; TOCH, Eran; XIA, Xin; MENDEL, Tamir; LO, David. (2019). *Proceedings of the ACM on Interactive, Mobile, Wearable and Ubiquitous Technologies, 3* (4), 154:1-22. https://doi.org/10.1145/3369819 (Published)

How does Machine Learning Change Software Development Practices?, by WAN, Zhiyuan; XIA, Xin; LO, David; MURPHY, Gail C.. (2021). *IEEE Transactions on Software Engineering, 47* (9), 1-14. https://doi.org/10.1109/TSE.2019.2937083 (Published)

An evaluation of pure spectrum-based fault localization techniques for large-scale software systems, by HEIDEN, Simon; GRUNSKE, Lars; KEHRER, Timo; KELLER, Fabian; VAN HOORN, Andre; FILIERI, Antonio; LO, David. (2019). *Software: Practice and Experience, 49* (8), 1197-1124. https://doi.org/10.1002/spe.2703 (Published)

Who should make decision on this pull request? Analyzing time-decaying relationships and file similarities for integrator prediction, by JIANG, Jing; LO, David; ZHENG, Jiateng; XIA, Xin; YANG, Yun; ZHANG, Li. (2019). *Journal of Systems and Software, 154* 196-210. https://doi.org/10.1016/j.jss.2019.04.055 (Published)

Memory and resource leak defects and their repairs in Java projects, by GHANAVATI, Mohammadreza;

COSTA, Diego; SEBOEK, Janos; LO, David; ANDRZEJAK, Artur. (2020). *Empirical Software Engineering, 25* (1), 678-718. https://doi.org/10.1007/s10664-019-09731-8 (Published)

Practical and effective sandboxing for Linux containers, by WAN, Zhiyuan; LO, David; XIA, Xin; CAI, Liang. (2019). *Empirical Software Engineering, 24* (6), 4034-4070. https://doi.org/10.1007/s10664-019-09737-2 (Published)

Network-Clustered Multi-Modal Bug Localization, by HOANG, Thong.; OENTARYO, Richard; LE, Tien-Duy; LO, David. (2019). *IEEE Transactions on Software Engineering, 45* (10), 1002-1023. https://doi.org/10.1109/TSE.2018.2810892 (Published)

Why is my code change abandoned?, by WANG, Qingye; XIA, Xin; LO, David; LI, Shanping. (2019). *Information and Software Technology, 110* 108-120. https://doi.org/10.1016/j.infsof.2019.02.007 (Published)

Automatic, highly accurate app permission recommendation, by LIU, Zhongxin; XIA, Xin; LO, David; GRUNDY, John. (2019). *Automated Software Engineering, 26* (2), 241-274. https://doi.org/10.1007/s10515-019-00254-6 (Published)

To the attention of mobile software developers: guess what, test your app!, by CRUZ, Luis C.; ABREU, Rui; LO, David. (2019). *Empirical Software Engineering, 24* (4), 1-32. https://doi.org/10.1007/s10664-019-09701-0 (Published)

Neural Network-based Detection of Self-Admitted Technical Debt: From Performance to Explainability, by REN, Xiaoxue; XING, Zhenchang; XIA, Xin; LO, David; WANG, Xinyu; GRUNDY, John. (2019). *ACM Transactions on Software Engineering and Methodology, 28* (3), 1-46. https://doi.org/10.1145/3324916 (Published)

Characterizing and identifying reverted commits, by YAN, Meng; XIA, Xin; LO, David; HASSAN, Ahmed E.; LI, Shanping. (2019). *Empirical Software Engineering, 24* (4), 2171-2208. https://doi.org/10.1007/s10664-019-09688-8 (Published)

Recommending New Features from Mobile App Descriptions, by JIANG, He; ZHANG, Jingxuan; LI, Xiaochen; REN, Zhilei; LO, David; WU, Xindong; LUO, Zhongxuan. (2019). *ACM Transactions on Software Engineering and Methodology, 28* (4), 1-29. https://doi.org/10.1145/3344158 (Published)

Automatic query reformulation for code search using crowdsourced knowledge, by RAHMAN, Mohammad M.; ROY, Chanchal K.; LO, David. (2019). *Empirical Software Engineering, 24* (4), 1869-1924. https://doi.org/10.1007/s10664-018-9671-0 (Published)

A first look at unfollowing behavior on GitHub, by JIANG, Jing; LO, David; YANG, Yun; LI, Jianfeng; ZHANG, Li. (2019). *Information and Software Technology, 105* 150-160. https://doi.org/10.1016/j.infsof.2018.08.012 (Published)

Early prediction of merged code changes to prioritize reviewing tasks, by FAN, Yuanrui; XIA, Xin; LO, David; LI, Shanping. (2018). *Empirical Software Engineering, 23* (6), 3346-3393. https://doi.org/10.1007/s10664-018-9602-0 (Published)

Improving reusability of software libraries through usage pattern mining, by SAIED, Mohamed Aymen; OUNI, Ali; SAHRAOUI, Houari A.; KULA, Raula Gaikovina; INOUE, Katsuro; LO, David. (2018). *Journal of Systems and Software, 145* 164-179. https://doi.org/10.1016/j.jss.2018.08.032 (Published)

Recommending Who to Follow in the Software Engineering Twitter Space, by SHARMA, Abhishek; TIAN, Yuan; SULISTYA, Agus; WIJEDASA, Dinusha; LO, David. (2018). *ACM Transactions on Software Engineering and Methodology, 27* (4), 16-33. https://doi.org/10.1145/3266426 (Published)

Categorizing the Content of GitHub README Files, by PRANA, Gede Artha Ariadi; TREUDE, Christoph; THUNG, Ferdian; ATAPATTU, Thushari; LO, David. (2019). *Empirical Software Engineering, 24* (3), 1-32. https://doi.org/10.1007/s10664-018-9660-3 (Published)

Revisiting supervised and unsupervised models for effort-aware just-in-time defect prediction, by HUANG, Qiao; XIA, Xin; LO, David. (2019). *Empirical Software Engineering, 24* (5), 2823-2862. https://doi.org/10.1007/s10664-018-9661-2 (Published)

Overfitting in semantics-based automated program repair, by LE, Xuan Bach D.; THUNG, Ferdian; LO, David; LE GOUES, Claire. (2018). *Empirical Software Engineering, 23* (5), 3007-3033. https://doi.org/10.1007/s10664-017-9577-2 (Published)

Augmenting and structuring user queries to support efficient free-form code search, by SIRRES, Raphael; BISSYANDE, Tegawendé F.; KIM, Dongsun; LO, David; KLEIN, Jacques; KIM, Kisub; TRAON, Yves Le. (2018). *Empirical Software Engineering, 23* (5), 2622-2654. https://doi.org/10.1007/s10664-017-9544-y (Published)

Measuring Program Comprehension: A Large-Scale Field Study with Professionals, by XIA, Xin; BAO, Lingfeng; LO, David; XING, Zhengchang; HASSAN, Ahmed E.; LI, Shanping. (2018). *IEEE Transactions on Software Engineering, 44* (10), 951-976. https://doi.org/10.1109/TSE.2017.2734091 (Published)

Fusing multi-abstraction vector space models for concern localization, by ZHANG, Yun; LO, David; XIA, Xin; SCANNIELLO, Giuseppe; LE, Tien-Duy B.; SUN, Jianling. (2018). *Empirical Software Engineering, 23* (4), 2279-2322. https://doi.org/10.1007/s10664-017-9585-2 (Published)

Inference of development activities from interaction with uninstrumented applications, by BAO, Lingfeng; XING, Zhenchang; XIA, Xin; LO, David; HASSAN, Ahmed E.. (2018). *Empirical Software Engineering, 23* (3), 1313-1351. https://doi.org/10.1007/s10664-017-9547-8 (Published)

EnTagRec(++): An enhanced tag recommendation system for software information sites, by WANG, Shaowei; LO, David; VASILESCU, Bogdan; SEREBRENIK, Alexander. (2018). *Empirical Software Engineering, 23* (2), 800-832. https://doi.org/10.1007/s10664-017-9533-1 (Published)

Combined classifier for cross-project defect prediction: an extended empirical study, by ZHANG, Yun; LO, David; XIA, Xin; SUN, Jianling. (2018). *Frontiers of Computer Science, 12* (2), 280-296. https://doi.org/10.1007/s11704-017-6015-y (Published)

Rule-based specification mining leveraging learning to rank, by CAO, Zherui; TIAN, Yuan; LE, Bui Tien Duy; LO, David. (2018). *Automated Software Engineering, 25* (3), 1-30. https://doi.org/10.1007/s10515-018-0231-z (Published)

VT-Revolution: Interactive Programming Video Tutorial Authoring and Watching System, by BAO, Lingfeng; XING, Zhenchang; XIA, Xin; LO, David. (2019). *IEEE Transactions on Software Engineering, 45* (8), 823-838. https://doi.org/10.1109/TSE.2018.2802916 (Published)

Identifying self-admitted technical debt in open source projects using text mining, by HUANG, Qiao; SHIHAB, Emad; XIA, Xin; LO, David; LI, Shanping. (2018). *Empirical Software Engineering, 23* (1), 418-451. https://doi.org/10.1007/s10664-017-9522-4 (Published)

What do developers search for on the web?, by XIA, Xin; BAO, Lingfeng; LO, David; KOCHHAR, Pavneet Singh; HASSAN, Ahmed E.; XING, Zhenchang. (2017). *Empirical Software Engineering, 22* (6), 3149-3185. https://doi.org/10.1007/s10664-017-9514-4 (Published)

Domain-specific cross-language relevant question retrieval, by XU, Bowen; XING, Zhenchang; XIA, Xin; LO, David; LI, Shanping. (2018). *Empirical Software Engineering, 23* (2), 1084-1122. https://doi.org/10.1007/s10664-017-9568-3 (Published)

Understanding inactive yet available assignees in GitHub, by JIANG, Jing; LO, David; MA, Xinyu; FENG, Fuli; ZHANG, Li. (2017). *Information and Software Technology, 91* 44-55. https://doi.org/10.1016/j.infsof.2017.06.005 (Published)

On Locating Malicious Code in Piggybacked Android Apps, by LI, Li; LI, Daoyuan; BISSYANDE, Tegawende F.; KLEIN, Jacques; CAI, Haipeng; LO, David; LE TRAON, Yves. (2017). *Journal of Computer Science and Technology, 32* (6), 1108-1124. https://doi.org/10.1007/s11390-017-1786-z (Published)

Code Coverage and Postrelease Defects: A Large-Scale Study on Open Source Projects, by KOCHHAR, Pavneet Singh; LO, David; LAWALL, Julia; NAGAPPAN, Nachiappan. (2017). *IEEE Transactions on Reliability, 66* (4), 1213-1228. https://doi.org/10.1109/TR.2017.2727062 (Published)

Automated Android application permission recommendation, by BAO, Lingfeng; LO, David; XIA, Xin; LI, Shanping. (2017). *SCIENCE CHINA Information Sciences, 60* (9), 1-17. https://doi.org/10.1007/s11432-016-9072-3 (Published)

Will this localization tool be effective for this bug? Mitigating the impact of unreliability of information retrieval based bug localization tools, by LE, Tien-Duy B.; THUNG, Ferdian; LO, David. (2017). *Empirical Software Engineering, 22* (4), 2237-2279. https://doi.org/10.1007/s10664-016-9484-y (Published)

TLEL: A two-layer ensemble learning approach for just-in-time defect prediction, by YANG, Xinli; LO, David;

XIA, Xin; SUN, Jianling. (2017). *Information and Software Technology, 87* 206-220. https://doi.org/10.1016/j.infsof.2017.03.007 (Published)

Understanding Android app piggybacking: A systematic study of malicious code grafting, by LI, Li; LI, Daoyuan; BISSYANDE, Tegawende F.; KLEIN, Jacques; TRAON, Yves Le; LO, David; CAVALLARO, Lorenzo. (2017). *IEEE Transactions on Information Forensics and Security, 12* (6), 1269-1284. https://doi.org/10.1109/TIFS.2017.2656460 (Published)

WebAPIRec: Recommending Web APIs to Software Projects via Personalized Ranking, by THUNG, Ferdian; OENTARYO, Richard J.; LO, David; TIAN, Yuan. (2017). *IEEE Transactions on Emerging Topics in Computational Intelligence, 1* (3), 145-156. https://doi.org/10.1109/TETCI.2017.2699222 (Published)

An effective change recommendation approach for supplementary bug fixes, by XIA, Xin; LO, David. (2017). *Automated Software Engineering, 24* (2), 455-498. https://doi.org/10.1007/s10515-016-0204-z (Published)

Characterizing malicious Android apps by mining topic-specific data flow signatures, by YANG, Xinli; LO, David; LI, Li; XIA, Xin; BISSYANDE, Tegawendé F.; KLEIN, Jacques. (2017). *Information and Software Technology, 90* 27-39. https://doi.org/10.1016/j.infsof.2017.04.007 (Published)

Clustering Classes in Packages for Program Comprehension, by SUN, Xiaobing; LIU, Xiangyue; LI, Bin; LI, Bixin; LO, David; LIAO, Lingzhi. (2017). *Scientific Programming, 2017* 1-15. https://doi.org/10.1155/2017/3787053 (Published)

Improving Automated Bug Triaging with Specialized Topic Model, by XIA, Xin; LO, David; DING, Ying; AL-KOFAHI, Jafar M.; NGUYEN, Tien N.; WANG, Xinyu. (2017). *IEEE Transactions on Software Engineering, 43* (3), 272-297. https://doi.org/10.1109/TSE.2016.2576454 (Published)

Why and how developers fork what from whom in GitHub, by JIANG, Jing; LO, David; HE, Jiahuan; XIA, Xin; KOCHHAR, Pavneet Singh; ZHANG, Li. (2017). *Empirical Software Engineering, 22* (1), 547-578. https://doi.org/10.1007/s10664-016-9436-6 (Published)

High-Impact Bug Report Identification with Imbalanced Learning Strategies, by YANG, Xinli; LO, David; XIA, Xin; HUANG, Qiao; SUN, Jianling. (2017). *Journal of Computer Science and Technology, 32* (1), 181-198. https://doi.org/10.1007/s11390-017-1713-3 (Published)

On the unreliability of bug severity data, by TIAN, Yuan; ALI, Nasir; LO, David; HASSAN, Ahmed E.. (2016). *Empirical Software Engineering, 21* (6), 2298-2323. https://doi.org/10.1007/s10664-015-9409-1 (Published)

Collective Personalized Change Classification With Multiobjective Search, by XIA, Xin; LO, David; WANG, Xinyu; YANG, Xiaohu. (2016). *IEEE Transactions on Reliability, 65* (4), 1810-1829. http://doi.org/10.1109/TR.2016.2588139 (Published)

AmaLgam plus : Composing Rich Information Sources for Accurate Bug Localization, by WANG, Shaowei; LO, David. (2016). *Journal of Software: Evolution and Process, 28* (10), 921-942. http://doi.org/10.1002/smr.1801 (Published)

HYDRA: Massively Compositional Model for Cross-Project Defect Prediction, by XIA, Xin; LO, David; PAN, Sinno Jialin; NAGAPPAN, Nachiappan; WANG, Xinyu. (2016). *IEEE Transactions on Software Engineering, 42* (10), 977-998. https://doi.ieeecomputersociety.org/10.1109/TSE.2016.2543218 (Published)

Automated Bug Report Field Reassignment and Refinement Prediction, by XIA, Xin; LO, David; SHIHAB, Emad; WANG, Xinyu. (2016). *IEEE Transactions on Reliability, 65* (3), 1094-1113. http://doi.org/10.1109/TR.2015.2484074 (Published)

AutoQuery: automatic construction of dependency queries for code search, by WANG, Shaowei; LO, David; JIANG, Lingxiao. (2016). *Automated Software Engineering, 23* (3), 393-425. http://doi.org/10.1007/s10515-014-0170-2 (Published)

What security questions do developers ask? A large-scale study of Stack Overflow posts, by YANG, Xinli; LO, David; XIA, Xin; WAN, Zhi-Yuan; SUN, Jian-Ling. (2016). *Journal of Computer Science and Technology, 31* (5), 910-924. https://doi.org/10.1007/s11390-016-1672-0 (Published)

Code Comment Quality Analysis and Improvement Recommendation: An Automated Approach, by SUN, Xiaobing; GENG, Qiang; LO, David; DUAN, Yucong; LIU, Xiangyue; LI Bin. (2016). *International Journal of Software Engineering and Knowledge Engineering, 26* (6), 981-1000.

http://doi.org/10.1142/S0218194016500339 (Published)

Diversity maximization speedup for localizing faults in single-fault and multi-fault programs, by XIA, Xin; GONG, Liang; LE, Tien-Duy B.; LO, David; JIANG, Lingxiao; ZHANG, Hongyu. (2016). *Automated Software Engineering, 23* (1), 43-75. http://doi.org/10.1007/s10515-014-0165-z (Published)

Collaborative 'many to many' DDoS detection in cloud, by MA, Siqi; LO, David; XI, Ning. (2016). *International Journal of Ad Hoc and Ubiquitous Computing, 23* (3-4), 192-202. https://doi.org/10.1504/IJAHUC.2016.10000397 (Published)

On detecting maximal quasi antagonistic communities in signed graphs, by GAO, Ming; LIM, Ee Peng; LO, David; PRASETYO, Philips Kokoh. (2016). *Data Mining and Knowledge Discovery, 30* (1), 99-146. https://doi.org/10.1007/s10618-015-0405-2 (Published)

Automated prediction of bug report priority using multi-factor analysis, by TIAN, Yuan; LO, David; XIA, Xin; SUN, Chengnian. (2015). *Empirical Software Engineering, 20* (5), 1354-1383. http://dx.doi.org/10.1007/s10664-014-9331-y (Published)

Should I follow this fault localization tool's output? Automated prediction of fault localization effectiveness, by LE, Tien-Duy B.; LO, David; THUNG, Ferdian. (2015). *Empirical Software Engineering, 20* (5), 1237-1274. https://doi.org/10.1007/s10664-014-9349-1 (Published)

Multi-Factor Duplicate Question Detection in Stack Overflow, by ZHANG, Yun; LO, David; XIA, Xin; SUN, Jian Ling. (2015). *Journal of Computer Science and Technology, 30* (5), 981-997. https://doi.org/10.1007/s11390-015-1576-4 (Published)

Tag Combine: Recommending Tags to Contents in Software Information Sites, by WANG, Xin Yu; XIA, Xin; LO, David. (2015). *Journal of Computer Science and Technology, 30* (5), 1017-1035. https://doi.org/10.1007/s11390-015-1578-2 (Published)

On the usefulness of ownership metrics in open-source software projects, by FOUCAULT, Matthieu; TEYTON, Cédric; LO, David; BLANC, Xavier.; FALLERI, Jean-Rémy. (2015). *Information and Software Technology, 64* 102-112. http://dx.doi.org/10.1016/j.infsof.2015.01.013 (Published)

ELBlocker: Predicting blocking bugs with ensemble imbalance learning, by XIA, Xin; LO, David; SHIHAB, Emad; WANG, Xinyu; YANG, Xiaohu. (2015). *Information and Software Technology, 61* 93-106. https://doi.org/10.1016/j.infsof.2014.12.006 (Published)

Dual analysis for recommending developers to resolve bugs, by XIA, Xin; LO, David; WANG, Xinyu; ZHOU, Bo. (2015). *Journal of Software: Evolution and Process, 27* (3), 195-220. https://doi.org/10.1002/smr.1706 (Published)

Automatic, high accuracy prediction of reopened bugs, by Xia, Xin; LO, David; Shihab, Emad; Wang, Xinyu; Zhou, Bo. (2015). *Automated Software Engineering, 22* (1), 75-109. http://dx.doi.org/10.1007/s10515-014-0162-2 (Published)

To what extent could we detect field defects? An extended empirical study of false negatives in static bug-finding tools, by THUNG, Ferdian; LUCIA; LO, David; JIANG, Lingxiao; RAHMAN, Foyzur; DEVANBU, Premkumar. (2015). *Automated Software Engineering, 22* (4), 561-602. http://doi.org/10.1007/s10515-014-0169-8 (Published)

Extended comprehensive study of association measures for fault localization, by LUCIA; LO, David; JIANG, Lingxiao; THUNG, Ferdian; BUDI, Aditya. (2014). *Journal of Software: Evolution and Process, 26* (2), 172-219. http://doi.org/10.1002/smr.1616 (Published)

Detecting Click Fraud in Online Advertising: A Data Mining Approach, by OENTARYO, Richard; LIM, Ee Peng; FINEGOLD, Michael; LO, David; ZHU, Feida; PHUA, Clifton; CHEU, Eng-Yeow; YAP, Ghim-Eng; SIM, Kelvin; NGUYEN, Minh Nhut; PERERA, Kasun; NEUPANE, Bijay; FAISAL, Mustafa; AUNG, Zeyar; WOON, Wei Lee; CHEN, Wei; DHAVAL PATEL, Dhaval; BERRAR, Daniel. (2014). *Journal of Machine Learning Research, 15* 99-140. (Published)

Clustering of search trajectory and its application to parameter tuning, by Lindawati, Linda; LAU, Hoong Chuin; LO, David. (2013). *Journal of the Operational Research Society, 64* (12), 1742-1752. http://doi.org/10.1057/jors.2012.167 (Published)

Mining direct antagonistic communities in signed social networks, by LO, David; SURIAN, Didi; PRASETYO, Philips Kokoh; KUAN, Zhang; LIM, Ee Peng. (2013). *Information Processing and Management, 49* (4),

773-791. https://doi.org/10.1016/j.ipm.2012.12.009 (Published)

Mining indirect antagonistic communities from social interactions, by ZHANG, Kuan; LO, David; LIM, Ee Peng; PRASETYO, Philips Kokoh. (2013). *Knowledge and Information Systems, 35* (3), 553-583. http://doi.org/10.1007/s10115-012-0519-4 (Published)

Mining quantified temporal rules: Formalism, algorithms, and evaluation, by LO, David; RAMALINGAM, Ganesan; RANGANATH, Venkatesh Prasad; VASWANI, Kapil. (2012). *Science of Computer Programming, 77* (6), 743-759. https://doi.org/10.1016/j.scico.2010.10.003 (Published)

Scenario-based and value-based specification mining: better together, by LO, David; MAOZ, Shahar. (2012). *Automated Software Engineering, 19* (4), 423-458. https://doi.org/10.1007/s10515-012-0103-x (Published)

Learning extended FSA from software: An empirical assessment, by LO, David; Mariani, Leonardo; Santoro, Mauro. (2012). *Journal of Systems and Software, 85* (9), 2063-2076. http://dx.doi.org/10.1016/j.jss.2012.04.001 (Published)

Mining Iterative Generators and Representative Rules for Software Specification Discovery, by LO, David; LI, Jinyan; WONG, Limsoon; KHOO, Siau-Cheng. (2011). *IEEE Transactions on Knowledge and Data Engineering, 23* (2), 282-296. https://doi.org/10.1109/TKDE.2010.24 (Published)

Data mining for software engineering, by XIE, Tao; Thummalapenta, Suresh; LO, David; LIU, Chao. (2009). *Computer, 42* (8), 55-62. http://doi.org/10.1109/MC.2009.256 (Published)

Non-redundant sequential rules-Theory and algorithm, by LO, David; KHOO, Siau-Cheng; WONG, Limsoon. (2009). *Information Systems, 34* (4-5), 438-453. https://doi.org/10.1016/j.is.2009.01.002 (Published)

Mining temporal rules for software maintenance, by LO, David; Khoo, Siau-Cheng; LIU, Chao. (2008). *Journal of Software: Evolution and Process, 20* (4), 227-247. http://dx.doi.org/10.1002/smr.375 (Published)

Journal Articles [Non-Refereed]

Leveraging machine learning and information retrieval techniques in software evolution tasks: Summary of the first MALIR-SE Workshop, at ASE 2013, by Lucia, -; LO, David; Scanniello, Giuseppe; Marchetto, Alessandro; Ali, Nasir; McMillan, Collin. (2014). *Software Engineering Notes, 39* (1), 1-2. http://dx.doi.org/10.1145/2557833.2560584 (Published)

Editorials

Scoping software engineering for AI: The TSE perspective, by UCHITEL, Sebastián; CHECHIK, Marsha; DI PENTA, Massimiliano; ADAMS, Bram; AGUIRRE, Nazareno; BAVOTA, Gabriele; BIANCULLI, Domenico; BLINCOE, Kelly; CAVALCANTI, Ana; DITTRICH, Yvonne; FERRUCCI, Filomena; HODA, Rashina; HUANG, LiGuo; LO, David; et al.. (2024). *IEEE Transactions on Software Engineering, 50* (11), 2709-2711. https://doi.org/10.1109/TSE.2024.3470368 (Published)

Guest Editorial: Special Issue on Software Engineering for Mobile Applications, by PANICHELLA, Sebastiano; PALOMBA, Fabio; LO, David; NAGAPPAN, Meiyappan. (2019). *Empirical Software Engineering, 24* (6), 3249-3254. https://doi.org/10.1007/s10664-019-09776-9 (Published)

Preface to the Special Issue on Program Comprehension, by LO, David; SEREBRENIK, Alexander. (2019). *Empirical Software Engineering, 24* (1), 208-210. https://doi.org/10.1007/s10664-018-9662-1 (Published)

Guest editor's introduction to the Special Issue on Source Code Analysis and Manipulation (SCAM 2015), by KHOMH, Foutse; LO, David; GODFREY, Michael W.. (2017). *Journal of Software: Evolution and Process, 29* (12), https://doi.org/10.1002/smr.1928 (Published)

Books (Refereed)

Network data mining and analysis by GAO, Ming; LIM, Ee-Peng; LO, David. (2019). East China Normal University Scientific Reports, 8. Singapore: World Scientific. https://doi.org/10.1142/11120 (Published)

Network data mining and analysis by GAO, Ming; LIM, Ee-Peng; LO, David. (2018). East China Normal

University Scientific Reports, 8. Singapore: World Scientific. https://doi.org/10.1142/11120 (Published)

Book Chapters

Android malware detection based on novel representations of apps, by SUN, Tiezhu; DAOUDI, Nadia; ALLIX, Kevin; SAMHI, Jordan; KIM, Kisub; ZHOU, Xin; KABORE, Abdoul K.; KIM, Dongsun; LO, David; BISSYANDE, Tegawende F.; KLEIN, Jacques. (2025). In Gritzalis, D., Choo, KK.R., & Patsakis, C. (Ed.), *Malware: Handbook of prevention and detection* (pp. 197-212) Cham: Springer. https://doi.org/10.1007/978-3-031-66245-4_8 (Published)

Sequence-to-sequence learning for automated software artifact generation, by LIU, Zhongxin; XIA, Xin; LO, David. (2021). In M. Kalech, R. Abreu, & M. Last (Ed.), *Artificial intelligence: Methods for software engineering* (pp. 111-140) Singapore: World Scientific. https://doi.org/10.1142/9789811239922_0005 (Published)

Feature generation and engineering for software analytics, by XIA, Xin; LO, David. (2018). In Guozhu Dong, and Huan Liu (Ed.), *Feature engineering for machine learning and data analytics* (pp. 335-358) Boca Raton, FL: CRC Press. https://worldcat.org/isbn/9781138744387 (Published)

Scalable parallelization of specification mining using distributed computing, by WANG, Shaowei; LO, David; JIANG, Lingxiao; MAOZ, Shahar; BUDI, Aditya. (2015). In C. Bird; T. Menzie; T. Zimmermann (Ed.), *The art and science of analyzing software data* (pp. 623-648) Amsterdam: Elsevier. http://doi.org/10.1016/B978-0-12-411519-4.00021-5 (Published)

Leveraging Web 2.0 for Software Evolution, by TIAN, Yuan; LO, David. (2014). In Mens, Tom; Serebrenik, Alexander; Cleve, Anthony (Ed.), *Evolving Software Systems* (pp. 163-197) New York: Springer Verlag. http://dx.doi.org/10.1007/978-3-642-45398-4_6 (Published)

Specification Mining: A Concise Introduction, by LO, David; KHOO, Siau-Cheng; LIU, Chao; HAN, Jiawei. (2011). In Lo, David; Khoo, Siau-Cheng; Han, Jiawei; Liu, Chao (Ed.), *Mining Software Specifications: Methodologies and Applications* Boca Raton, FL: CRC Press. http://worldcat.org/isbn/978-1439806265 (Published)

Mining Past-Time Temporal Rules: A Dynamic Analysis Approach, by LO, David; KHOO, Siau-Cheng; LIU, Chao. (2009). *Artificial Intelligence Applications for Improved Software Engineering Development: New Prospects* (pp. 259-277) Hershey, PA: Information Science Reference. http://worldcat.org/isbn/9781605667584 (Published)

Encyclopedia Entries

Social collaborative media in software development, by SURIAN, Didi; LO, David. (2018). In R. Alhajj & J. Rokne (Ed.), *Encyclopedia of social network analysis and mining* Cham: Springer. https://doi.org/10.1007/978-1-4939-7131-2 (Published)

Collaboration patterns in software developer network, by SURIAN, Didi; LIM, Ee-Peng; LO, David. (2018). In R. Alhajj, & J. Rokne (Ed.), *Encyclopedia of social network analysis and mining* (pp. 224-229) Cham: Springer. https://doi.org/10.1007/978-1-4939-7131-2_292 (Published)

Social collaborative media in software development, by SURIAN, Didi; LO, David. (2018). In Alhajj, Reda; Rokne, Jon (Ed.), *Encyclopedia of Social Network Analysis and Mining* Springer. (Published)

Collaboration patterns in software developer network, by SURIAN, Didi; LO, David; LIM, Ee Peng. (2014). In Alhajj, Reda; Rokne, Jon (Ed.), *Encyclopedia of Social Network Analysis and Mining* (pp. 118-124) New York: Springer Verlag. http://doi.org/10.1007/978-1-4614-6170-8_292 (Published)

Mining Software Specifications, by LO, David; KHOO, Siau-Cheng. (2009). In Wang, John (Ed.), *Encyclopedia of Data Warehousing and Mining* (pp. 1301-) Hershey, PA: Information Science Reference. (Published)

Edited Books

Mining Software Specifications: Methodologies and Applications, edited by LO, David; KHOO, Siau-Cheng; LIU, Chao; HAN, Jiawei. (2011). Chapman and Hall/CRC Data Mining and Knowledge Discovery Series, Boca Raton, FL: CRC Press. http://worldcat.org/isbn/9781439806265 (Published)

Conference Proceedings

APIDocBooster: An extract-then-abstract framework leveraging large language models for augmenting API documentation, by YANG, Chengran; LIU, Jiakun; XU, Bowen; TREUDE, Christoph; LYU, Yunbo; HE, Junda; LI, Ming; LO, David. (2025.0). *2025 IEEE International Conference on Software Maintenance and Evolution, ICSME: Auckland, September 7-12: Proceedings,* (pp. 36-47) Los Alamos: IEE Computer Society. https://doi.org/10.1109/ICSME64153.2025.00014 (Published)

DynDebloater: Dynamically debloating unwanted features of Android apps without APK modification, by ZHANG, Zicheng, LIU, Jiakun, THUNG, Ferdian, HU, Xing, MINN, Wei, TUN, Yan Naing, SHAR, Lwin Khin, LO, David, GAO, Debin. (2025.0). *FSE Companion '25: Proceedings of the 33rd ACM International Conference on the Foundations of Software Engineering, Trondheim, Norway, June 23-28,* (pp. 1055-1059) New York: ACM. https://doi.org/10.1145/3696630.3728580 (Published)

An empirical study of automatic program repair techniques for injection vulnerabilities, by ZHU, Tingwei; XU, Tongtong; LIU, Kui; ZHOU, Jiayuan; HU, Xing; XIA, Xin; ZHANG, Tian; LO, David. (2024.0). *Proceedings of the 40th IEEE International Conference on Software Maintenance and Evolution (ICSME 2024): Flagstaff, AZ, USA, October 6-11,* (pp. 25-37) Los Alamitos, CA: IEEE. https://doi.org/10.1109/ICSME58944.2024.00014 (Published)

CoSec : On-the-Fly security hardening of code LLMs via supervised co-decoding, by LI, Dong; YAN Meng; ZHANG, Yaosheng; LIU, Zhongxin; LIU, Chao; ZHANG, Xiaohong; CHEN, Ting; LO, David. (2024.0). *Proceedings of the 33rd ACM SIGSOFT International Symposium on Software Testing and Analysis (ISSTA 2024) : Vienna, Austria, September 16-20,* (pp. 1428-1439) New York, USA: Association for Computing Machinery. https://doi.org/10.1145/3650212.3680371 (Published)

Practitioners' expectations on automated test generation, by YU, Xiao; LIU, Lei; HU, Xing; KEUNG, Jacky; XIA, Xin; LO, David. (2024.0). *Proceedings of the 33rd ACM SIGSOFT International Symposium on Software Testing and Analysis (ISSTA 2024) : Vienna, Austria, September 16-20,* (pp. 1618-1630) New York, USA: Association for Computing Machinery. https://doi.org/10.1145/3650212.3680386 (Published)

FDI : Attack neural code generation systems through user feedback channel, by SUN, Zhensu; DU, Xiaoning; LUO, Xiapu; SONG, Fu; LO, David; LI, Li. (2024.0). *Proceedings of the 33rd ACM SIGSOFT International Symposium on Software Testing and Analysis (ISSTA 2024) : Vienna, Austria, September 16-20,* (pp. 528-540) New York, NY, USA: Association for Computing Machinery. https://doi.org/10.1145/3650212.3680300 (Published)

AI coders are among us : Rethinking programming language grammar towards efficient code generation, by SUN Zhensu; DU Xiaoning; YANG Zhou; LI Li; LO David. (2024.0). *Proceedings of the 33rd ACM SIGSOFT International Symposium on Software Testing and Analysis (ISSTA 2024) : Vienna, Austria, September 16-20,* (pp. 1124-1136) New York, NY, USA: Association for Computing Machinery. https://doi.org/10.1145/3650212.3680347 (Published)

A NEW HOPE: Contextual privacy policies for mobile applications and an approach toward automated generation, by PAN, Shidong; TAO, Zhen; HOANG, Thong; ZHANG, Dawen; LI, Tianshi; XING, Zhenchang; XU, Xiwei; STAPLES, Mark; RAKOTOARIVELO, Thierry; LO, David. (2024.0). *Proceedings of the 33rd USENIX Security Symposium, Philadelphia, USA, 2024 August 14-16,* (pp. 1-18) Philadelphia, USA: USENIX. (Published)

Baffle: Hiding backdoors in offline reinforcement learning datasets, by GONG, Chen; YANG, Zhou; BAI, Yunpeng; HE, Junda; SHI, Jieke; LI, Kecen; SINHA, Arunesh; XU, Bowen; HOU, Xinwen; LO, David; WANG, Tianhao. (2024.0). *Proceedings of the 45th IEEE Symposium on Security and Privacy (SP 2024) : San Francisco, CA, USA, May 20-23,* (pp. 2086-2104) San Francisco, USA: IEEE. https://doi.org/10.1109/SP54263.2024.00224 (Published)

Robust auto-scaling with probabilistic workload forecasting for cloud databases, by HANG, Haitian; TANG, Xiu; SUN, Jianling; BAO, Lingfeng; LO, David; WANG, Haoye. (2024.0). *2024 40th IEEE 40th International Conference on Data Engineering (ICDE): Utrecht, Netherlands, May 13-16: Proceedings,* (pp. 4016-4029) Los Alamitos, CA: IEEE Computer Society. https://doi.org/10.1109/ICDE60146.2024.00308 (Published)

The Grader: A grading assistant for lab tests and a teaching tool, by THULASIDAS, Manoj; LO, David. (2024.0). *2024 IEEE Global Engineering Education Conference, EDUCON): Kos Island, Greece, May 8-11: Proceedings,* (pp. 1-10) Piscataway, NJ: IEEE. https://doi.org/10.1109/EDUCON60312.2024.10578671 (Published)

Regret-based defense in adversarial reinforcement learning, by BELAIRE, Roman; VARAKANTHAM, Pradeep; NGUYEN, Thanh Hong; LO, David. (2024.0). *AAMAS '24: Proceedings of the 23rd International Conference on Autonomous Agents and Multiagent Systems, Auckland, New Zealand, May 6-10,* (pp. 2633-2640) New York: ACM. https://doi.org/10.5555/3635637.3663250 (Published)

Streamlining Java programming: uncovering well-formed idioms with IdioMine, by YANG, Yanming; HU, Xing; XIA, Xin; LO, David; YANG, Xiaohu. (2024.0). *ICSE '24: Proceedings of the IEEE/ACM 46th International Conference on Software Engineering, Lisbon, Portugal, April 14-20,* (pp. 1-12) New York: ACM. https://doi.org/10.1145/3597503.3639135 (Published)

Large language model for vulnerability detection: Emerging results and future directions, by ZHOU, Xin; ZHANG, Ting; LO, David. (2024.0). *ICSE-NIER'24: Proceedings of the 2024 ACM/IEEE 44th International Conference on Software Engineering: New Ideas and Emerging Results, Lisbon, Portugal, April 14-20,* (pp. 47-51) New York: ACM. https://doi.org/10.1145/3639476.3639762 (Published)

Out of sight, out of mind: Better automatic vulnerability repair by broadening input ranges and sources, by ZHOU, Xin; KIM, Kisub; XU, Bowen; HAN, DongGyun; LO, David. (2024.0). *ICSE '24: Proceedings of the IEEE/ACM 46th International Conference on Software Engineering, Lisbon, Portugal, April 14-20,* (pp. 1-13) New York: ACM. https://doi.org/10.1145/3597503.3639222 (Published)

Greening large language models of code, by SHI, Jieke; YANG, Zhou; KANG, Hong Jin; XU, Bowen; HE, Junda; LO, David. (2024.0). *ICSE-SEIS'24: Proceedings of the 46th International Conference on Software Engineering: Software Engineering in Society, Lisbon, Portugal, April 14-20 ,* (pp. 142-153) New York: ACM. https://doi.org/10.1145/3639475.3640097 (Published)

Extracting relevant test inputs from bug reports for automatic test case generation, by Ouédraogo, Wendkuuni C.; Plein, Laura; Kaboré, Kader; Habib, Andrew; Klein, Jacques; LO, David; Bissyandé, Tegawende F.. (2024.0). *2024 IEEE/ACM 46thInternational Conference on Software Engineering: Companion Proceedings, Lisbon, April 14-20,* (pp. 406-407) Washington, DC: IEEE Computer Society. https://doi.org/10.1145/3639478.3643537 (Published)

MUT: Human-in-the-loop unit test migration, by GAO, Yi; HU, Xing; XU, Tongtong; XIA, Xin; LO, David; YANG, Xiaohu. (2024.0). *ICSE '24: Proceedings of the IEEE/ACM 46th International Conference on Software Engineering, Lisbon, Portugal, April 14-20,* (pp. 1-12) New York: ACM. https://doi.org/10.1145/3597503.3639124 (Published)

FAIR: Flow type-aware pre-training of compiler intermediate representations, by NIU, Changan; LI, Chuanyi; NG, Vincent; LO, David; LUO, Bin. (2024.0). *Proceedings of the 2024 IEEE/ACM 46th International Conference on Software Engineering (ICSE), Lisbon, Portugal, April 14-20,* (pp. 378-389) Los Alamitos, CA: IEEE. (Published)

MiniMon: Minimizing Android applications with intelligent monitoring-based debloating, by LIU, Jiakun; ZHANG, Zicheng; HU, Xing; THUNG, Ferdian; MAOZ, Shahar; GAO, Debin; TOCH, Eran; ZHAO, Zhipeng; LO, David. (2024.0). *ICSE '24: Proceedings of the IEEE/ACM 46th International Conference on Software Engineering, Lisbon, Portugal, April 14-20,* (pp. 1-13) New York: ACM. https://doi.org/10.1145/3597503.3639113 (Published)

Assessing AI detectors in identifying AI-generated code: Implications for education, by PAN, Wei Hung; CHOK, Ming Jie; WONG, Jonathan Leong Shan; SHIN, Yung Xin; POON, Yeong Shian; YANG, Zhou; CHONG, Chun Yong; LO, David; LIM, Mei Kuan. (2024.0). *ICSE-SEET '24: Proceedings of the 46th International Conference on Software Engineering: Software Engineering Education and Training, Lisbon, Portugal, April 14-20,* (pp. 1-11) New York: ACM. (Published)

Code search is all you need? Improving code suggestions with code search, by CHEN, Junkai; HU, Xing; LI, Zhenhao; GAO, Cuiyun; XIA, Xin; LO, David. (2024.0). *ICSE '24: Proceedings of the IEEE/ACM 46th International Conference on Software Engineering, Lisbon, Portugal, April 14-20,* (pp. 1-13) New York: ACM. https://doi.org/10.1145/3597503.363908 (Published)

PS3: Precise patch presence test based on semantic symbolic signature, by ZHAN, Qi; HU, Xing; LI, Zhiyang; XIA, Xin; LO, David; LI, Shanping. (2024.0). *ICSE '24: Proceedings of the IEEE/ACM 46th International Conference on Software Engineering, Lisbon, Portugal, April 14-20,* (pp. 1-12) New York: ACM. https://doi.org/10.1145/3597503.3639134 (Published)

Exploiting library vulnerability via migration-based automated test generation, by CHEN, Zirui; HU, Xing; XIA, Xin; GAO, Yi; XU, Tongtong; LO, David; YANG, Xiaohu. (2024.0). *ICSE '24: Proceedings of the IEEE/ACM*

46th International Conference on Software Engineering, Lisbon, Portugal, April 14-20, (pp. 1-12) New York: ACM. https://doi.org/10.1145/3597503.3639583 (Published)

Curiosity-driven testing for sequential decision-making process, by HE, Junda; YANG, Zhou; SHI, Jieke; YANG, Chengran; KIM, Kisub; XU, Bowen; ZHOU, Xin; LO, David. (2024.0). *ICSE '24: Proceedings of the IEEE/ACM 46th International Conference on Software Engineering, Lisbon, Portugal, April 14-20,* (pp. 1-14) New York: ACM. https://doi.org/10.1145/3597503.363914 (Published)

Coca: Improving and explaining graph neural network-based vulnerability detection systems, by CAO, Sicong; SUN, Xiaobing; WU, Xiaoxue; LO, David; BO, Lili; LI, Bin; LIU, Wei . (2024.0). *ICSE '24: Proceedings of the IEEE/ACM 46th International Conference on Software Engineering, Lisbon, Portugal, April 14-20,* (pp. 1-13) New York: ACM. https://doi.org/10.1145/3597503.3639168 (Published)

Unveiling memorization in code models, by YANG, Zhou; ZHAO, Zhipeng; WANG, Chenyu; SHI, Jieke; KIM, Dongsun; HAN, DongGyun; LO, David. (2024.0). *ICSE '24: Proceedings of the IEEE/ACM 46th International Conference on Software Engineering, Lisbon, Portugal, April 14-20,* (pp. 1-13) New York: ACM. https://doi.org/10.1145/3597503.363907 (Published)

Towards speedy permission-based debloating for Android apps, by THUNG, Ferdian; LIU, Jiakun; RATTANUKUL, Pattarakrit; MAOZ, Shahar; TOCH, Eran; GAO, Debin; LO, David. (2024.0). *MOBILESoft '24: Proceedings of the IEEE/ACM 11th International Conference on Mobile Software Engineering and Systems, Lisbon Portugal, April 14-15,* (pp. 84-87) New York: ACM. https://doi.org/10.1145/3647632.3651390 (Published)

Towards benchmarking the coverage of automated testing tools in Android against manual testing, by THUNG, Ferdian; IRSAN, Ivana Clairine; LIU, Jiakun; LO, David. (2024.0). *MOBILESoft '24: Proceedings of the IEEE/ACM 11th International Conference on Mobile Software Engineering and Systems, Lisbon Portugal, April 14-15,* (pp. 74-77) New York: ACM. https://doi.org/10.1145/3647632.3651394 (Published)

PPT4J: Patch presence test for Java binaries, by PAN, Zhiyuan; HU, Xing; XIA, Xin; ZHAN, Xian; LO, David; YANG, Xiaohu. (2024.0). *ICSE '24: Proceedings of the IEEE/ACM 46th International Conference on Software Engineering, Lisbon, Portugal, April 14-20,* (pp. 1-12) New York: ACM. https://doi.org/10.1145/3597503.3639231 (Published)

Sustainability forecasting for deep learning packages, by HAN, Junxiao; WANG, Yunkun; LIU, Zhongxin; BAO, Lingfeng; LIU, Jiakun; LO, David; DENG, Shuiguang . (2024.0). *2024 IEEE International Conference on Software Analysis, Evolution and Reengineering (SANER), Rovaniemi, Finland, March 12-15: Proceedings,* (pp. 981-992) Los Alamitos, CA: IEEE Computer Society. https://doi.org/10.1109/SANER60148.2024.00106 (Published)

Self-admitted technical debts identification: How far are we?, by GU, Hao; ZHANG, Shichao; HUANG, Qiao; LIAO, Zhifang; LIU, Jiakun; LO, David. (2024.0). *2024 IEEE International Conference on Software Analysis, Evolution and Reengineering (SANER), Rovaniemi, Finland, March 12-15, Proceedings,* (pp. 804-815) Los Alamitos, CA: IEEE Computer Society. https://doi.org/10.1109/SANER60148.2024.00087 (Published)

Demystifying faulty code: Step-by-step reasoning for explainable fault localization, by WIDYASARI, Ratnadira; ANG, Jia Wei; NGUYEN, Truong Giang; SHARMA, Neil; LO, David. (2024.0). *Proceedings of the 2024 IEEE International Conference on Software Analysis, Evolution and Reengineering (SANER), Rovaniemi, Finland, March 12-15,* (pp. 568-579) Los Alamitos, CA: IEEE. https://doi.org/10.1109/SANER60148.2024.00064 (Published)

Software architecture in practice: Challenges and opportunities, by WAN, Zhiyuan; ZHANG, Yun; XIA, Xin; JIANG, Yi; LO, David. (2023.0). *ESEC/FSE '23: Proceedings of ACM Joint European Software Engineering Conference and Symposium on the Foundations of Software Engineering, San Francisco, December 3-9,* (pp. 1457-1469) New York: ACM. https://doi.org/10.1145/3611643.3616367 (Published)

On the usage of continual learning for out-of-distribution generalization in pre-trained language models of code, by WEYSSOW, Martin; ZHOU, Xin; KIM, Kisub; LO, David; SAHRAOUI, Houari A.. (2023.0). *ESEC/FSE '23: Proceedings of ACM Joint European Software Engineering Conference and Symposium on the Foundations of Software Engineering, San Francisco, December 3-9,* (pp. 1470 -1482) New York: ACM. https://doi.org/10.1145/3611643.3616244 (Published)

C³: Code clone-based identification of duplicated components, by YANG, Yanming; ZOU, Ying; HU, Xing; LO, David; NI, Chao; GRUNDY, John C.; XIA, Xin:. (2023.0). *ESEC/FSE '23: Proceedings of ACM Joint European Software Engineering Conference and Symposium on the Foundations of Software Engineering, San Francisco, December 3-9,* (pp. 1832 -1843) New York: ACM. https://doi.org/10.1145/3611643.3613883

(Published)

The future can't help fix the past: Assessing program repair in the wild, by KABADI, Vinay; KONG, Dezhen; XIE, Siyu; BAO, Lingfeng; AZRIADI PRANA, Gede A.; LE, Tien Duy B.; LE, Xuan Bach D.; LO, David. (2023.0). *2023 IEEE International Conference on Software Maintenance and Evolution, ICSME: Bogota, October 1-6: Proceedings,* (pp. 50-61) Piscataway, NJ: IEE. https://doi.org/10.1109/ICSME58846.2023.00017 (Published)

The devil is in the tails: How long-tailed code distributions impact large language models, by ZHOU, Xin; KIM, Kisub; XU, Bowen; LIU, Jiakun; HAN, DongGyun; LO, David. (2023.0). *Proceedings of the 38th IEEE/ACM International Conference on Automated Software Engineering, Echternach, Luxembourg, 2023 September 11-15,* (pp. 40-52) New Jersey: IEEE. https://doi.org/10.1109/ASE56229.2023.00157 (Published)

Are we ready to embrace generative AI for software Q&A?, by XU, Bowen; NGUYEN, Thanh-Dat; CONG, Thanh Le; HOANG, Thong; LIU, Jiakun; KIM, Kisub; GONG, Chen; NIU, Changan; WANG, Chenyu; LE, Xuan-Bach Dinh; LO, David. (2023.0). *Proceedings - 2023 38th IEEE/ACM International Conference on Automated Software Engineering, ASE 2023,* Luxembourg: (Published)

AutoDebloater: Automated android app debloating, by LIU, Jiakun; HU, Xing; THUNG, Ferdian; MAOZ, Shahar; TOCH, Eran; GAO, Debin; LO, David. (2023.0). *2023 38th IEEE/ACM International Conference on Automated Software Engineering, Kirchberg, Luxembourg, September 11-15: Proceedings,* (pp. 2090-2093) Piscataway, NJ: IEEE. https://doi.org/10.1109/ASE56229.2023.00017 (Published)

Are we ready to embrace generative AI for software Q&A?, by XU, Bowen; NGUYEN, Thanh-Dat; LE-CONG, Thanh; HOANG, Thong; LIU, Jiakun; KIM, Kisub; GONG, Chen; NIU, Changan; WANG, Chenyu; LE, Bach; LO, David. (2023.0). *2023 38th IEEE/ACM International Conference on Automated Software Engineering: Luxembourg, September 11-15: Proceedings,* (pp. 1713-1717) Piscataway, NJ: IEEE. https://doi.org/10.1109/ASE56229.2023.00023 (Published)

Synthesizing speech test cases with text-to-speech? An empirical study on the false alarms in automated speech recognition testing, by LAU, Julia Kaiwen; KONG, Kelvin Kai Wen; YONG, Julian Hao; TAN, Per Hoong; YANG, Zhou; YONG, Zi Qian; LOW, Joshua Chern Wey; CHONG, Chun Yong; LIM, Mei Kuan; LO, David. (2023.0). *Proceedings of the 32nd ACM SIGSOFT International Symposium on Software Testing and Analysis, Seattle, USA, 2023 July 17-21,* (pp. 1169-1181) New York: ACM. https://doi.org/10.1145/3597926.3598126 (Published)

TECHSUMBOT: A Stack Overflow answer summarization tool for technical query, by YANG, Chengran; XU, Bowen; LIU, Jiakun; LO, David. (2023.0). *45th IEEE/ACM International Conference on Software Engineering: ICSE 2023 Companion Proceedings, Melbourne, Australia, May 14-20,* (pp. 132-135) New York, NY, USA: IEEE. https://doi.org/10.1109/ICSE-Companion58688.2023.00040 (Published)

Fine-grained commit-level vulnerability type prediction by CWE tree structure, by PAN, Shengyi; BAO, Lingfeng; XIA, Xin; LO, David; LI, Shanping. (2023.0). *Proceedings of the 45th IEEE/ACM International Conference on Software Engineering, ICSE 2023, Melbourne, Australia, May 14-20,* (pp. 957-969) New York, NY, USA: IEEE Computer Society. https://doi.org/10.1109/ICSE48619.2023.00088 (Published)

CHRONOS: Time-aware zero-shot identification of libraries from vulnerability reports, by LYU, Yunbo; CONG, Thanh Le; KANG, Hong Jin; WIDYASARI, Ratnadira; ZHAO, Zhipeng; LE, Xuan-Bach Dinh; LI, Ming; LO, David. (2023.0). *45th IEEE/ACM International Conference on Software Engineering, ICSE 2023,* MELBOURNE, AUSTRALIA: (Published)

Trustworthy and synergistic artificial intelligence for software engineering: Vision and roadmaps, by LO, David. (2023.0). *2023 IEEE/ACM International Conference on Software Engineering: Future of Software Engineering (ICSE-FoSE): Melbourne, May 14-16,* (pp. 69-85) Piscataway, NJ: IEEE. https://doi.org/10.1109/ICSE-FoSE59343.2023.00010 (Published)

CoLeFunDa: Explainable silent vulnerability fix identification, by ZHOU, Jiayuan; PACHECO, Michael; CHEN, Jinfu; HU, Xing; XIA, Xin; LO, David; HASSAN, Ahmed E.. (2023.0). *Proceedings of the International Conference on Software Engineering, Melbourne, May 15-16,* (pp. 2565-2577) New Jersey, USA: IEEE. (Published)

Two sides of the same coin: Exploiting the impact of identifiers in neural code comprehension, by GAO, Shuzheng; GAO, Cuiyun; WANG, Chaozheng; SUN, Jun; LO, David; YU, Yue. (2023.0). *Proceedings of the 45th IEEE/ACM International Conference on Software Engineering, Melbourne, Australia, 2023 May 15-16,* (pp. 1933-1945) New Jersey: IEEE. https://doi.org/10.1109/ICSE48619.2023.00164 (Published)

What do users ask in open-source AI repositories? An empirical study of GitHub issues, by YANG, Zhou;

WANG, Chenyu; SHI, Jieke; HOANG, Thong; KOCHHAR, Pavneet Singh; LU, Qinghua; XING, Zhenchang; LO, David. (2023.0). *Proceedings of the 20th IEEE/ACM International Conference on Mining Software Repositories, Melbourne, Australia 2023 May 15-16,* (pp. 79-91) New Jersey: IEEE. https://doi.org/10.1109/MSR59073.2023.00024 (Published)

Picaso: Enhancing API recommendations with relevant stack overflow posts, by IRSAN, Ivana Clairine; ZHANG, Ting; THUNG, Ferdian; KIM, Kisub; LO, David. (2023.0). *Proceedings of the 20th IEEE/ACM International Conference on Mining Software Repositories, Melbourne, Australia, 2023 May 15-16,* (pp. 92-103) New Jersey: IEEE. https://doi.org/10.1109/MSR59073.2023.00025 (Published)

Generation-based code review automation: How far are we?, by ZHOU, Xin; KIM, Kisub; XU, Bowen; HAN, DongGyun; HE, Junda; LO, David. (2023.0). *Proceedings of the 31st IEEE/ACM International Conference on Program Comprehension, Melbourne, Australia, 2023 May 15-16,* (pp. 215-226) New Jersey: IEEE. https://doi.org/10.1109/ICPC58990.2023.00036 (Published)

Boosting just-in-time defect prediction with specific features of C/C++ programming languages in code changes, by NI, Chao; XU, Xiaodan; YANG, Kaiwen; LO, David. (2023.0). *2023 IEEE/ACM 20th International Conference on Mining Software Repositories (MSR): Melbourne, May 15-16: Proceedings,* (pp. 472-484) Piscataway, NJ: IEEE. https://doi.org/10.1109/MSR59073.2023.00072 (Published)

NICHE: A curated dataset of engineered machine learning projects in Python, by WIDYASARI, Ratnadira; YANG, Zhou; THUNG, Ferdian; SIM, Sheng Qin; WEE, Fiona; LOK, Camellia; PHAN, Jack; QI, Haodi; TAN, Constance, TAY, Qijin; LO, David. (2023.0). *Proceedings of the 20th IEEE/ACM International Conference on Mining Software Repositories, Melbourne, Australia, May 15-16,* (pp. 62-66) New Jersey: IEEE. https://doi.org/10.1109/MSR59073.2023.00022 (Published)

A study of variable-role-based feature enrichment in neural models of code, by HUSSAIN, Aftab.; RABIN, Md. Rafiqul Islam.; XU, Bowen.; LO, David.; ALIPOUR, Mohammad Amin.. (2023.0). *2023 IEEE/ACM International Workshop on Interpretability and Robustness in Neural Software Engineering (InteNSE),* (pp. 14-20) Melbourne: IEEE. (Published)

ASDF: A Differential testing framework for automatic speech recognition systems, by YUEN, Daniel Hao Xian; PANG, Andrew Yong Chen; YANG, Zhou; CHONG, Chun Yong; LIM, Mei Kuan; LO, David. (2023.0). *Proceedings of the 16th IEEE International Conference on Software Testing, Verification and Validation, Dublin, Ireland, 2023 April 16-20,* (pp. 461-463) New Jersey: IEEE. https://doi.org/10.1109/ICST57152.2023.00050 (Published)

Exploring and repairing gender fairness violations in word embedding-based sentiment analysis model through adversarial patches, by KHOO, Lin Sze; BAY, Jia Qi; YAP, Ming Lee Kimberly; LIM, Mei Kuan; CHONG, Chun Yong; YANG, Zhou; LO, David. (2023.0). *Proceedings of the 2023 IEEE International Conference on Software Analysis, Evolution and Reengineering, SANER 2023, Macao, March 21-24,* (pp. 651-) New Jersey, USA: Institute of Electrical and Electronics Engineers. (Published)

Multi-modal API recommendation, by IRSAN, Ivana Clairine; ZHANG, Ting; THUNG, Ferdian; KIM, Kisub; LO, David. (2023.0). *Proceedings of the 2023 IEEE International Conference on Software Analysis, Evolution and Reengineering (SANER), Taipa, Macao, March 21-24,* (pp. 1-12) Piscataway, NJ: IEEE. (Published)

Automatic identification of crash-inducing smart contracts, by NI, Chao; TIAN, Cong; YANG, Kaiwen; LO, David; CHEN, Jiachi; YANG, Xiaohu. (2023.0). *2023 30th IEEE International Conference on Software Analysis, Evolution and Reengineering (SANER): Macao, March 21-24,* (pp. 108-119) Piscataway, NJ: IEEE. https://doi.org/10.1109/SANER56733.2023.00020 (Published)

Topic recommendation for GitHub repositories: How far can extreme multi-label learning go?, by WIDYASARI, Ratnadira; ZHAO, Zhipeng; CONG, Thanh Le; KANG, Hong Jin; LO, David. (2023.0). *IEEE International Conference on Software Analysis, Evolution and Reengineering, SANER 2023,* Taipa, Macao: (Published)

Human-centered AI for software engineering: Requirements, reflection, and road ahead, by LO, David. (2023.0). *ISCE '23: Proceedings of the 16th Innovations in Software Engineering Conference, Allahabad, India, February 23-25,* (pp. 1-1) New York: ACM. https://doi.org/10.1145/3578527.3581767 (Published)

Curiosity-driven and victim-aware adversarial policies, by GONG, Chen; YANG, Zhou; BAI, Yunpeng; SHI, Jieke; SINHA, Arunesh; XU, Bowen; LO, David; HOU, Xinwen; FAN, Guoliang. (2022.0). *Proceedings of the 38th Annual Computer Security Applications Conference, Austin, TX, USA, 2022 December 5-9,* (pp. 186-200) New York: Association for Computing Machinery. https://doi.org/10.1145/3564625.3564636

(Published)

VulCurator: a vulnerability-fixing commit detector, by NGUYEN, Truong Giang; LE-CONG, Thanh; KANG, Hong Jin; LE, Xuan-Bach D.; LO, David. (2022.0). *Proceedings of the 30th ACM Joint European Software Engineering Conference and Symposium on the Foundations of Software Engineering, Singapore, 2022 November 14-18,* (pp. 1726-1730) Singapore: Association for Computing Machinery. https://doi.org/10.1145/3540250.3558936 (Published)

AutoPruner: transformer-based call graph pruning, by LE-CONG, Thanh; KANG, Hong Jin; NGUYEN, Truong Giang; HARYONO, Stefanus Agus; LO, David; LE, Xuan-Bach D.; THANG, Huynh Quyet. (2022.0). *Proceedings of the 30th ACM Joint European Software Engineering Conference and Symposium on the Foundations of Software Engineering, Singapore, 2022 November 14-18,* (pp. 520-532) New York: Association for Computing Machinery. https://doi.org/10.1145/3540250.3549175 (Published)

RecipeGen++: An automated trigger action programs generator, by YUSUF, Imam Nur Bani; ABDUL JAMAL, Diyanah; JIANG, Lingxiao; LO, David. (2022.0). *ESEC/FSE 2022: Proceedings of the 30th ACM Joint European Software Engineering Conference and Symposium on the Foundations of Software Engineering, Singapore, November 14-18,* (pp. 1672-1676) New York: ACM. http://doi.org/10.1145/3540250.3558913 (Published)

The best of both worlds: integrating semantic features with expert features for defect prediction and localization, by NI, Chao; WANG, Wei; YANG, Kaiwen; XIA, Xin; LIU, Kui; LO, David. (2022.0). *Proceedings of the 30th ACM Joint European Software Engineering Conference and Symposium on the Foundations of Software Engineering, Singapore, 2022 November 14 - 18,* (pp. 672-683) New York: Association for Computing Machinery. https://doi.org/10.1145/3540250.3549165 (Published)

What motivates software practitioners to contribute to inner source?, by WAN, Zhiyuan; XIA, Xin; ZHANG, Yun; LO, David; ZHOU, Daibing; CHEN, Qiuyuan; HASSAN, Ahmed E.. (2022.0). *Proceedings of the 30th ACM Joint European Software Engineering Conference and Symposium on the Foundations of Software Engineering, Singapore, Singapore, 2022 November 14-18,* (pp. 132-144) New York: Association for Computing Machinery. https://doi.org/10.1145/3540250.3549148 (Published)

CodeMatcher: A tool for large-scale code search based on query semantics matching, by LIU, Chao; BAO, Xuanlin; XIA, Xin; YAN, Meng; LO, David; ZHANG, Ting. (2022.0). *ESEC/FSE '22: Proceedings of the 30th ACM Joint European Software Engineering Conference and Symposium on the Foundations of Software Engineering, Singapore, Singapore, November 14-18,* (pp. 1642-1646) New York: ACM. https://doi.org/10.1145/3540250.3558935 (Published)

iTiger: An automatic issue title generation tool, by ZHANG, Ting; IRSAN, Ivana Clairine; THUNG, Ferdian; HAN, DongGyun; LO, David; JIANG, Lingxiao. (2022.0). *Proceedings of the 30th ACM Joint European Software Engineering Conference and Symposium on the Foundations of Software Engineering, ESEC/FSE 2022, Singapore, Singapore, November 14-18, 2022,* (pp. 1637-1641) Singapore: ACM. http://doi.org/10.1145/3540250.3558934 (Published)

How to better utilize code graphs in semantic code search?, by SHI, Yucen; YIN, Ying; WANG, Zhengkui; LO, David; ZHANG, Tao; XIA, Xin; ZHAO, Yuhai; XU, Bowen. (2022.0). *Proceedings of the 30th ACM Joint European Software Engineering Conference and Symposium on the Foundations of Software Engineering, Singapore, Singapore, 2022 November 14-18*
, (pp. 722-733) New York: Association for Computing Machinery.
https://doi.org/10.1145/3540250.3549087 (Published)

Accurate generation of trigger-action programs with domain-adapted sequence-to-sequence learning, by YUSUF, Imam Nur Bani; JIANG, Lingxiao; LO, David. (2022.0). *Proceedings of the 30th IEEE/ACM International Conference on Program Comprehension, ICPC 2022, Virtual Event, May 16-17, 2022,* (pp. 99-110) Virtual Event: ACM. https://doi.org/10.1145/3524610.3527922 (Published)

Compressing pre-trained models of code into 3 MB, by SHI, Jieke; YANG, Zhou; XU, Bowen; KANG, Hong Jin; LO, David. (2022.0). *ASE '22: Proceedings of the 37th IEEE/ACM International Conference on Automated Software Engineering, Rochester, MI, October 10-14,* (pp. 1-12) New York: ACM. https://doi.org/10.1145/3551349.3556964 (Published)

TransplantFix: Graph differencing-based code transplantation for automated program repair, by YANG, Deheng; MAO, Xiaoguang; CHEN, Liqian; XU, Xuezheng; LEI, Yan; LO, David; HE, Jiayu. (2022.0). *ASE '22: Proceedings of the 37th IEEE/ACM International Conference on Automated Software Engineering, Rochester, MI, October 10-14,* (pp. 1-13) New York: ACM. https://doi.org/10.1145/3551349.3556893

(Published)

Answer summarization for technical queries: benchmark and new approach, by YANG, Chengran; XU, Bowen; THUNG, Ferdian; SHI, Yucen; ZHANG, Ting; YANG, Zhou; ZHOU, Xin; SHI, Jieke; HE, Junda; HAN, DongGyun; LO, David. (2022.0). *ASE '22: Proceedings of the 37th IEEE/ACM International Conference on Automated Software Engineering, Rochester, MI, October 10-14,* (pp. 1-13) New York: ACM. https://doi.org/10.1145/3551349.3560421 (Published)

Automatic pull request title generation, by ZHANG, Ting; IRSAN, Ivana Clairine; THUNG, Ferdian; HAN, DongGyun; LO, David; JIANG, Lingxiao. (2022.0). *2022 IEEE International Conference on Software Maintenance and Evolution: Limassol, Cyprus, October 2-7: Proceedings,* (pp. 71-81) Piscataway, NJ: IEEE. https://doi.org/10.1109/ICSME55016.2022.00015 (Published)

FFL: fine grained fault localization for student programs via syntactic and semantic reasoning, by NGUYEN, Thanh-Dat; LE-CONG, Thanh; LUONG, Duc-Minh; DUONG, Van-Hai; LE, Xuan-Bach D.; LO, David; HUYNH, Quyet-Thang. (2022.0). *2022 38th IEEE International Conference on Software Maintenance and Evolution: Limassol, Cyprus, October 2-7: Proceedings,* (pp. 151-162) Piscataway, NJ: IEEE. https://doi.org/10.1109/ICSME55016.2022.00022 (Published)

AUTOPRTITLE: A tool for automatic pull request title generation, by IRSAN, Ivana Clairine; ZHANG, Ting; THUNG, Ferdian; LO, David; JIANG, Lingxiao. (2022.0). *2022 IEEE International Conference on Software Maintenance and Evolution (ICSME): Limassol, Cyprus, October 2-7: Proceedings,* (pp. 454-458) Piscataway, NJ: IEEE. https://doi.org/10.1109/ICSME55016.2022.00058 (Published)

Test mimicry to assess the exploitability of library vulnerabilities, by KANG, Hong Jin; NGUYEN, Truong Giang; LE, Bach; PASAREANU, Corina S.; LO, David. (2022.0). *ISSTA '22: 31st ACM SIGSOFT International Symposium on Software Testing and Analysis, Virtual Event, July 18-22,* (pp. 276-288) Pittsburgh, PA: Association for Computing Machinery. https://doi.org/10.1145/3533767.3534398 (Published)

Static inference meets deep learning: a hybrid type inference approach for python, by PENG, Yun; GAO, Cuiyun; LI, Zongjie; GAO, Bowei; LO, David; ZHANG, Qirun; LYU, Michael R.. (2022.0). *Proceedings of the 44th International Conference on Software Engineering, Pittsburgh, PA, USA, 2022 May 21-29,* (pp. 2019-2030) New York: Association for Computing Machinery. https://doi.org/10.1145/3510003.3510038 (Published)

ShellFusion: answer generation for shell programming tasks via knowledge fusion, by ZHANG, Neng; LIU, Chao; XIA, Xin; TREUDE, Christoph; ZOU, Ying; LO, David; ZHENG, Zibin. (2022.0). *Proceedings of the 44th International Conference on Software Engineering, Pittsburgh, USA, 2022 May 25 - 27,* Pittsburgh, PA: IEEE Computer Society. https://doi.org/10.1145/3510003.3510131 (Published)

Practitioners' expectations on automated code comment generation, by HU, Xing; XIA, Xin; LO, David; WAN, Zhiyuan; CHEN, Qiuyuan; ZIMMERMANN, Thomas. (2022.0). *Proceedings of the 44th International Conference on Software Engineering, Pittsburgh, PA, USA, 2022 May 21-29,* (pp. 1693-1705) New York: Association for Computing Machinery. https://doi.org/10.1145/3510003.3510152 (Published)

Detecting false alarms from automatic static analysis tools: how far are we?, by KANG, Hong Jin; AW, Khai Loong; LO, David. (2022.0). *Proceedings of the 44th International Conference on Software Engineering, Pittsburgh, PA, USA, 2022 May 21-29*
, (pp. 698-709) New York: Association for Computing Machinery.
https://doi.org/10.1145/3510003.3510214 (Published)

Natural attack for pre-trained models of code, by YANG, Zhou; SHI, Jieke; HE, Junda; LO, David. (2022.0). *Proceedings of the 44th International Conference on Software Engineering, Pittsburgh, PA, USA, 2022 May 21-29*
, (pp. 1482-1493) New York: Association for Computing Machinery.
https://doi.org/10.1145/3510003.3510146 (Published)

ARSearch: searching for API related resources from stack overflow and GitHub, by LUONG, Kien; THUNG, Ferdian; LO, David. (2022.0). *Proceedings of the IEEE/ACM 44th International Conference on Software Engineering: Companion Proceedings, Pittsburgh, PA, USA, 2022 May 22-24*
, (pp. 11-15) New York: Association for Computing Machinery. https://doi.org/10.1145/3510454.3517048 (Published)

ARSeek: identifying API resource using code and discussion on stack overflow, by LUONG, Kien; HADI, Mohammad; THUNG, Ferdian; FARD, Fatemeh H.; LO, David. (2022.0). *Proceedings of the 30th IEEE/ACM International Conference on Program Comprehension, Pittsburgh, United States, 2022 May 16 - 17,* (pp.

331-342) Pittsburgh, Pennsylvania: IEEE Computer Society. https://doi.org/10.1145/3524610.3527918 (Published)

Automated identification of libraries from vulnerability data: can we do better?, by HARYONO, Stefanus A.; KANG, Hong Jin; SHARMA, Abhishek; SHARMA, Asankhaya; SANTOSA, Andrew E.; ANG, Ming Yi; LO, David. (2022.0). *Proceedings of the 30th International Conference on Program Comprehension, Virtual Event, 2022 May 16-17,* New York: Association for Computing Machinery. https://doi.org/10.1145/3377813.3381360 (Published)

Benchmarking library recognition in tweets, by ZHANG, Ting; CHANDRASEKARAN, Divya Prabha; THUNG, Ferdian; LO, David. (2022.0). *Proceedings of the 30th IEEE/ACM International Conference on Program Comprehension, ICPC 2022, Virtual Event, May 16-17, 2022,* (pp. 343-353) Virtual Event: IEEE. https://doi.org/10.1145/3524610.3527916 (Published)

PTM4Tag: Sharpening tag recommendation of stack overflow posts with pre-trained models, by HE, Junda; XU, Bowen; YANG, Zhou; HAN, DongGyun; YANG, Chengran; LO, David. (2022.0). *ICPC '22: Proceedings of the 30th IEEE/ACM International Conference on Program Comprehension, Virtual, 2022 May 16-17,* (pp. 1-11) New York: ACM. https://doi.org/10.1145/3524610.3527897 (Published)

XAI4FL: enhancing spectrum-based fault localization with explainable artificial intelligence, by WIDYASARI, Ratnadira; PRANA, Gede Artha Azriadi; HARYONO, Stefanus A.; TIAN, Yuan; ZACHIARY, Hafil Noer; LO, David. (2022.0). *Proceedings of the 30th IEEE/ACM International Conference on Program Comprehension, Pittsburgh, USA, 2022 May 16-17,* (pp. 499-510) Pittsburgh, USA: Institute of Electrical and Electronics Engineers Inc. https://doi.org/10.1145/3524610.3527902 (Published)

On the effectiveness of pretrained models for API learning, by HADI, Mohammad Abdul; YUSUF, Imam Nur Bani; THUNG, Ferdian; LUONG, Kien Gia; JIANG, Lingxiao; FARD, Fatemeh H.; LO, David. (2022.0). *Proceedings of the 30th IEEE/ACM International Conference on Program Comprehension, Pittsburgh, USA, 2022 May 16-17,* (pp. 309-320) Washington, DC: IEEE Computer Society. https://doi.org/10.1145/3524610.3527886 (Published)

An exploratory study on code attention in BERT, by SHARMA, Rishab; CHEN, Fuxiang; FARD, Fatemeh H.; LO, David. (2022.0). *Proceedings of the 30th International Conference on Program Comprehension, Virtual Event, 2022 May 16-17,* (pp. 437-448) New York: Association for Computing Machinery. https://doi.org/10.1145/3524610.3527921 (Published)

On the transferability of pre-trained language models for low-resource programming languages, by CHEN, Fuxiang; FARD, Fatemeh H.; LO, David; BRYKSIN, Timofey. (2022.0). *Proceedings of the 30th IEEE/ACM International Conference on Program Comprehension, ICPC 2022, Virtual Event, May 16-17*

, (pp. 401-412) New York: Association for Computing Machinery. https://doi.org/10.1145/3524610.3527917 (Published)

Simple or complex? Together for a more accurate just-in-time defect predictor, by ZHOU, Xin; HAN, DongGyun; LO, David. (2022.0). *Proceedings of the 30th International Conference on Program Comprehension, Virtual Event, 2022 May 16-17,* (pp. 229-240) New Jersey: Institute of Electrical and Electronics Engineers. https://doi.org/10.1145/3524610.3527910 (Published)

ITSS: Interactive web-based authoring and playback integrated environment for programming tutorials, by OUH, Eng Lieh; GAN, Benjamin Kok Siew; LO, David. (2022.0). *2022 44th IEEE/ACM International Conference on Software Engineering, Virtual, May 8-13: Proceedings,* (pp. 158-164) Piscataway, NJ: IEEE. https://doi.org/10.1145/3510456.3514142 (Published)

ReSIL: Revivifying function signature inference using deep learning with domain-specific knowledge, by LIN, Yan; GAO, Debin; LO, David. (2022.0). *Proceedings of the 12th ACM Conference on Data and Application Security and Privacy, Baltimore, USA, 2022 April 24-27,* (pp. 107-118) Baltimore, USA: ACM. https://doi.org/10.1145/3508398.3511502 (Published)

Revisiting neuron coverage metrics and quality of deep neural networks, by YANG, Zhou; SHI, Jieke; ASYROFI, Muhammad Hilmi; LO, David. (2022.0). *2022 IEEE International Conference on Software Analysis, Evolution and Reengineering (SANER), Honolulu, March 15 - 18: Proceedings,* (pp. 408-419) Piscataway, NJ: IEEE. https://doi.org/10.1109/SANER53432.2022.00056 (Published)

Efficient search of live-coding screencasts from online videos, by YANG, Chengran; THUNG, Ferdian; LO, David. (2022.0). *Proceedings of the 2022 IEEE International Conference on Software Analysis, Evolution and Reengineering, Honolulu, HI, USA, March 15-18,* New Jersey: Institute of Electrical and Electronics

Engineers. https://doi.org/10.1109/SANER53432.2022.00021 (Published)

HERMES: Using commit-issue linking to detect vulnerability-fixing commits, by TRUONG, Giang Nguyen; KANG, Hong Jin; LO, David; SHARMA, Abhishek; SANTOSA, Andrew E.; SHARMA, Asankhaya; ANG, Ming Yi. (2022.0). *2022 IEEE International Conference on Software Analysis, Evolution and Reengineering, Honolulu, HI, March 15-18: Prceedings,* (pp. 51-62) Piscataway, NJ: IEEE. https://doi.org/10.1109/SANER53432.2022.00018 (Published)

Analyzing offline social engagements: an empirical study of meetup events related to software development, by SHARMA, Abhishek; PRANA, Gede Artha Azriadi; SAWHNEY, Anamika; NAGAPPAN, Nachiappan; LO, David. (2022.0). *Proceedings of the 29th IEEE International Conference on Software Analysis, Evolution and Reengineering, SANER 2022, Honolulu, HI, USA, March 15-18, 2022,* (pp. 1122-1133) Honolulu, HI, USA: IEEE. http://doi.org/10.1109/SANER53432.2022.00129 (Published)

On the influence of biases in bug localization: evaluation and benchmark, by WIDYASARI, Ratnadira; HARYONO, Stefanus Agus; THUNG, Ferdian; SHI, Jieke; TAN, Constance; WEE, Fiona; PHAN, Jack; LO, David. (2022.0). *Proceedings of the 29th IEEE International Conference on Software Analysis, Evolution and Reengineering, SANER 2022, Honolulu, HI, USA, March 15-18, 2022,* (pp. 128-139) Honolulu, HI, USA: IEEE. http://doi.org/10.1109/SANER53432.2022.00027 (Published)

Can identifier splitting improve open-vocabulary language model of code?, by SHI, Jieke; YANG, Zhou; HE, Junda; XU, Bowen; LO, David. (2022.0). *2022 IEEE International Conference on Software Analysis, Evolution and Reengineering (SANER): Honolulu, March 15-18: Proceedings,* (pp. 1134-1138) Piscataway, NJ: IEEE. https://doi.org/10.1109/SANER53432.2022.00130 (Published)

Aspect-based API review classification: how far can pre-trained transformer model go?, by YANG, Chengran; XU, Bowen; KHAN, Junaed Younus; UDDIN, Gias; HAN, DongGyun; YANG, Zhou; LO, David. (2022.0). *2022 IEEE International Conference on Software Analysis, Evolution and Reengineering: Honolulu, HI, March 15-18: Proceedings,* (pp. 1-11) Piscataway, NJ: IEEE. https://doi.org/10.1109/SANER53432.2022.00054 (Published)

Empirical evaluation of minority oversampling techniques in the context of Android malware detection, by SHAR, Lwin Khin; DUONG, Ta Nguyen Binh; LO, David. (2021.0). *2021 28th Asia-Pacific Software Engineering Conference (APSEC): Taiwan, December 6-9: Proceedings,* (pp. 349-359) Los Alamitos, CA: IEEE Computer Society. https://doi.org/10.1109/APSEC53868.2021.00042 (Published)

Automating developer chat mining, by PAN, Shengyi; BAO, Lingfeng; REN, Xiaoxue; XIA, Xin; LO, David; LI, Shanping. (2021.0). *2021 36th IEEE/ACM International Conference on Automated Software Engineering (ASE): Melbourne' November 14-20: Proceedings,* (pp. 854-866) Piscataway, NJ: IEEE. https://doi.org/10.1109/ASE51524.2021.9678923 (Published)

Finding a needle in a haystack: Automatic mining of silent vulnerability fixes, by ZHOU, Jiayuan; PACHECO, Michael; WAN, Zhiyuan; XIA, Xin; LO, David; WANG, Yuan; HASSAN, Ahmed E.. (2021.0). *Proceedings of the 36th IEEE/ACM International Conference on Automated Software Engineering (ASE 2021), Virtual November 14-20,* Melbourne, Australia: (Published)

IncBL: Incremental Bug Localization, by YANG Zhou; SHI Jieke; WANG Shaowei; LO, David. (2021.0). *Proceedings of the 36th IEEE/ACM International Conference on Automated Software Engineering (ASE 2021), Virtual, November 14-20,* Melbourne, Australia: (Published)

Automating user notice generation for smart contract functions, by HU, Xing; GAO, Zhipeng; XIA, Xin; LO, David; YANG, Xiaohu. (2021.0). *Proceedings of the 36th IEEE/ACM International Conference on Automated Software Engineering (ASE 2021), Melbourne, Australia, November 15-19,* (pp. 1-13) Melbourne, Australia: (Published)

MLCatchUp: Automated update of deprecated machine-learning APIs in Python, by HARYONO, Stefanus A.; THUNG, Ferdian; LO, David; LAWALL, Julia; JIANG, Lingxiao. (2021.0). *IEEE International Conference on Software Maintenance and Evolution (ICSME),* Virtual Event, Luxembourg: IEEE. https://doi.org/10.1109/ICSME52107.2021.00061 (Published)

Assessing generalizability of CodeBERT, by ZHOU, Xin; HAN, DongGyun; LO, David. (2021.0). *Proceedings of the 37th IEEE International Conference on Software Maintenance and Evolution (ICSME 2021), Virtual Conference, September 27- October 1,* (pp. 425-436) Virtual Conference: IEEE. https://doi.org/10.1109/ICSME52107.2021.00044 (Published)

An exploratory study of social support systems to help older adults in managing mobile safety, by

MENDEL, Tamir; GAO, Debin; LO, David; TOCH, Eran. (2021.0). *The ACM International Conference on Mobile Human-Computer Interaction (Mobile HCI 2021),* Virtual: (Published)

Disambiguating mentions of API methods in stack overflow via type scoping, by LUONG, Kien; THUNG, Ferdian; LO, David. (2021.0). *37th IEEE International Conference on Software Maintenance and Evolution (ICSME 2021),* (pp. 679-683) Luxembourg: IEEE. (Published)

A first look at accessibility issues in popular GitHub projects, by BI, Tingting; XIA, Xin; LO, David; ALETI, Aldeida. (2021.0). *Proceedings of the 37th IEEE International Conference on Software Maintenance and Evolution (ICSME 2021), Virtual, September 27- October 1,* New York : IEEE . (Published)

Can differential testing improve automatic speech recognition systems?, by ASYROFI, Muhammad Hilmi; YANG, Zhou; SHI, Jieke; QUAN, Chu Wei; LO, David. (2021.0). *Proceedings of the 37th IEEE International Conference on Software Maintenance and Evolution (ICSME 2021), Luxembourg, September 27 - October 1* , New York : IEEE . (Published)

BiasHeal: On-the-fly black-box healing of bias in sentiment analysis systems, by YANG, Zhou; JAIN, Harshit; SHI, Jieke; ASYROFI, Muhammad Hilmi; LO, David. (2021.0). *Proceedings of the 37th IEEE International Conference on Software Maintenance and Evolution (ICSME 2021), Luxembourg, September 27 - October 1,* (pp. 644-648) Luxembourg: IEEE. (Published)

Characterization and automatic updates of deprecated machine-learning API usages, by HARYONO, Stefanus A.; THUNG, Ferdian; LO, David; LAWALL, Julia; JIANG, Lingxiao. (2021.0). *37th IEEE International Conference on Software Maintenance and Evolution (ICSME 2021),* Virtual Event, Luxembourg: IEEE. http://doi.org/10.1109/ICSME52107.2021.00019 (Published)

CrossASR++: A modular differential testing framework for automatic speech recognition, by ASYROFI, Muhammad Hilmi; YANG, Zhou; LO, David. (2021.0). *29th ACM Joint European Software Engineering Conference and Symposium on the Foundations of Software Engineering (ESEC/FSE '21),* (pp. 1575-1579) Athens, Greece: Association for Computing Machinery. (Published)

Automating the removal of obsolete TODO comments, by GAO, Zhipeng; XIA, Xin; LO, David; GRUNDY, John C.; ZIMMERMANN, Thomas. (2021.0). *Proceedings of the 29th ACM Joint European Software Engineering Conference and Symposium on the Foundations of Software Engineering: ESEC/FSE 2021, Athens, Greece, August 23-28,* (pp. 218-229) Athens, Greece: ACM. (Published)

Code2Que: A tool for improving question titles from mined code snippets in stack overflow, by GAO, Zhipeng; XIA, Xin; LO, David; GRUNDY, John C.; LI, Yuan-Fang. (2021.0). *ESEC/FSE '21: Proceedings of the 29th ACM Joint European Software Engineering Conference and Symposium on the Foundations of Software Engineering, Virtual Online, August 23-28,* (pp. 1525-1529) New York : ACM. https://doi.org/10.1145/3468264.3473114 (Published)

Characterizing search activities on stack overflow, by LIU, Jiakun; BALTES, Sebastian; TREUDE, Christoph; LO, David; ZHANG, Yun; XIA, Xin. (2021.0). *Proceedings of the 29th ACM Joint European Software Engineering Conference and Symposium on the Foundations of Software Engineering (ESEC/FSE '21), Virtual Online, August 23-28,* (pp. 919-931) New York : ACM. (Published)

BiasRV: uncovering biased sentiment predictions at runtime, by YANG, Zhou; ASYROFI, Muhammad Hilmi; LO, David. (2021.0). *Proceedings of the 29th ACM Joint European Software Engineering Conference and Symposium on the Foundations of Software Engineering (ESEC/FSE '21) Jun 23-28,* (pp. 1540-1544) New York : ACM. (Published)

Smart contract security: A practitioners' perspective, by WAN, Zhiyuan; XIA, Xin; LO, David; CHEN, Jiachi; LUO, Xiapu; YANG, Xiaohu. (2021.0). *Proceedings of the 43rd IEEE/ACM International Conference on Software Engineering (ICSE 2021), Virtual Conference, May 22-30,* (pp. 1410-1422) Virtual Conference: ACM. (Published)

Automatic solution summarization for crash bugs, by WANG, Haoye; XIA, Xin; LO, David; GRUNDY, John C.; WANG, Xinyu. (2021.0). *2021 IEEE/ACM 43rd International Conference on Software Engineering (ICSE): Madrid, May 22-30: Proceedings,* (pp. 1286-1297) Piscataway, NJ: IEEE. https://doi.org/10.1109/ICSE43902.2021.00117 (Published)

A differential testing approach for evaluating abstract syntax tree mapping algorithms, by FAN, Yuanrui; XIA, Xin; LO, David; HASSAN, Ahmed E.; WANG, Yuan; LI, Shanping. (2021.0). *43rd IEEE/ACM International Conference on Software Engineering (ICSE 2021),* (pp. 1174-1185) Madrid, Spain: IEEE. (Published)

Unveiling the mystery of API evolution in deep learning frameworks: A case study of Tensorflow 2, by ZHANG, Zejun; YANG, Yanming; XIA, Xin; LO, David; REN, Xiaoxue; GRUNDY, John C.. (2021.0). *43rd IEEE/ACM International Conference on Software Engineering: Software Engineering in Practice (ICSE 2021),* (pp. 238-247) Madrid, Spain: IEEE. (Published)

AndroEvolve: Automated update for Android deprecated-API usages, by HARYONO, Stefanus A.; THUNG, Ferdian; LO, David; JIANG, Lingxiao; LAWALL, Julia; KANG, Hong Jin; SERRANO, Lucas; MULLER, Gilles. (2021.0). *2021 IEEE/ACM 43rd International Conference on Software Engineering (ICSE): May 25-28, Madrid, Virtual: Proceedings,* (pp. 1-4) Piscataway, NJ: IEEE. https://doi.org/10.1109/ICSE-Companion52605.2021.00021 (Published)

An empirical study of the landscape of open source projects in Baidu, Alibaba, and Tencent, by HAN, Junxiao; DENG, Shuiguang; LO, David; ZHI, Chen; YIN, Jianwei; XIA, Xin. (2021.0). *Proceedings of the 43rd IEEE/ACM International Conference on Software Engineering: Software Engineering in Practice (ICSE 2021), ,* (pp. 298-307) Madrid, Spain: ACM. (Published)

Characterization and prediction of questions without accepted answers on Stack Overflow, by YAZDANINIA, Mohamad; LO, David; SAMI, Ashkan. (2021.0). *2021 29th IEEE/ACM International Conference on Program Comprehension (ICPC): Virtual, 20-21 May: Proceedings,* (pp. 1-12) Piscataway, NJ: IEEE. https://doi.org/10.1109/ICPC52881.2021.00015 (Published)

TOUR: Dynamic topic and sentiment analysis of user reviews for assisting app release, by YANG, Tianyi; GAO, Cuiyun; ZANG, Jingya; LO, David; LYU, Michael R.. (2021.0). *Proceedings of WWW'21: The Web Conference 2021, Ljubljana, Slovenia, April 19-23,* (pp. 708-712) Ljubljana, Slovenia: ACM. (Published)

IoTBox: Sandbox Mining to Prevent Interaction Threats in IoT Systems, by KANG, Hong Jin; SIM, Sheng Qin; LO, David. (2021.0). *Proceedings of the 14th IEEE Conference on Software Testing, Verification and Validation (ICST 2021), Virtual, April 12-16,* New York : IEEE . (Published)

How do users answer MATLAB questions on Q&A sites? A case study on stack overflow and MathWorks, by NAGHASHZADEH, Mahshid; HAGSHENAS, Amir; SAMI, Ashkan; LO, David. (2021.0). *28th IEEE International Conference on Software Analysis, Evolution and Reengineering (SANER 2021),* Honolulu, HI, USA: (Published)

Is the ground truth really accurate? Dataset purification for automated program repair, by YANG, Deheng; LEI, Yan; MAO, Xiaoguang; LO, David; XIE, Huan; YAN, Meng. (2021.0). *28th IEEE International Conference on Software Analysis, Evolution and Reengineering (SANER 2021),* Honolulu, HI, USA: IEEE. (Published)

SmartFuzz: An automated smart fuzzing approach for testing SmartThings apps, by SHAR, Lwin Khin; TA, Nguyen Binh Duong; JIANG, Lingxiao; LO, David; WEI, Minn; YEO, Kiah Yong Glenn; KIM, Eugene. (2020.0). *2020 27th Asia-Pacific Software Engineering Conference (APSEC): December 1-4, Singapore: Proceedings,* (pp. 365-374) Piscataway, NJ: IEEE. https://doi.org/10.1109/APSEC51365.2020.00045 (Published)

DeepCommenter: A deep code comment generation tool with hybrid lexical and syntactical information, by LI, Boao; YAN, Meng; XIA, Xin; HU, Xing; LI, Ge; LO, David. (2020.0). *ESEC/FSE '20: Proceedings of the 28th ACM Joint European Software Engineering Conference and Symposium on the Foundations of Software Engineering: Virtual, November 8-13,* (pp. 1571-1575) New York: ACM. https://doi.org/10.1145/3368089.3417926 (Published)

Effort-aware just-in-time defect identification in practice: A case study at Alibaba, by YAN, Meng; XIA, Xin; FAN, Yuanrui; LO, David; HASSAN, Ahmed E.; ZHANG, Xindong. (2020.0). *ESEC/FSE '20: Proceedings of the 28th ACM Joint European Software Engineering Conference and Symposium on the Foundations of Software Engineering: 8-13 November, online,* (pp. 1308-1319) New York: ACM. https://doi.org/10.1145/3368089.3417048 (Published)

Enhancing developer interactions with programming screencasts through accurate code extraction, by BAO, Lingfeng; PAN, Shengyi; XING, Zhenchang; XIA, Xin; LO, David; YANG, Xiaohu. (2020.0). *ESEC/FSE '20: Proceedings of the 28th ACM Joint European Software Engineering Conference and Symposium on the Foundations of Software Engineering: 8-13 November, online,* (pp. 1581-1585) New York: ACM. https://doi.org/10.1145/3368089.3417925 (Published)

JITO: A tool for just-in-time defect identification and localization, by QIU, Fangcheng; YAN, Meng; XIA, Xin; WANG, Xinyu; FAN, Yuanrui; HASSAN, Ahmed E.; LO, David. (2020.0). *ESEC/FSE '20: Proceedings of the 28th ACM Joint European Software Engineering Conference and Symposium on the Foundations of Software Engineering: Virtual, November 8-13,* (pp. 1586-1590) New York: ACM. https://doi.org/10.1145/3368089.3417927 (Published)

BugsInPy: A database of existing bugs in Python programs to enable controlled testing and debugging studies, by WIDYASARI, Ratnadira; SIM, Sheng Qin; LOK, Camellia; QI, Haodi; PHAN, Jack; TAY, Qijin; TAN, Constance; WEE, Fiona; TAN, Jodie Ethelda; YIEH, Yuheng; GOH, Brian; THUNG, Ferdian; KANG, Hong Jin; HOANG, Thong; LO, David; OUH, Eng Lieh. (2020.0). *ESEC/FSE 2020: Proceedings of the 28th ACM Joint Meeting on European Software Engineering Conference and Symposium on the Foundations of Software Engineering: 9-13 November, Virtual,* (pp. 1556-1560) New York: ACM. https://doi.org/10.1145/3368089.3417943 (Published)

CrossASR: Efficient differential testing of automatic speech recognition via text-to-speech, by ASYROFI, Muhammad Hilmi; THUNG, Ferdian; LO, David; JIANG, Lingxiao. (2020.0). *2020 36th IEEE International Conference on Software Maintenance and Evolution (ICSME): 27 Sep - 3 Oct, Adelaide, Australia: Proceedings,* (pp. 640-650) Piscataway, NJ: IEEE. https://doi.org/10.1109/ICSME46990.2020.00066 (Published)

An empirical study of the dependency networks of deep learning libraries, by HAN, Junxiao; DENG, Shuiguang; LO, David; ZHI, Chen; YIN, Jianwei; XIA, Xin. (2020.0). *2020 36th IEEE International Conference on Software Maintenance and Evolution (ICSME): Adelaide, September 27 - October 3: Proceedings,* (pp. 868-878) Piscataway, NJ: IEEE. https://doi.org/10.1109/ICSME46990.2020.00116 (Published)

DCT: An scalable multi-objective module clustering tool, by TARCHETTI, Ana Paula M.; AMARAL, Luis Henrique Vieira; OLIVEIRA, Marcos C.; BONIFACIO, Rodrigo; PINTO, Gustavo; LO, David. (2020.0). *2020 20th IEEE International Workshop on Source Code Analysis and Manipulation (SCAM): September 27 - October 3, Adelaide, Virtual: Proceedings,* (pp. 171-176) Piscataway, NJ: IEEE. https://doi.org/10.1109/SCAM51674.2020.00024 (Published)

Sentiment analysis for software engineering: How far can pre-trained transformer models go?, by ZHANG, Ting; XU, Bowen; THUNG, Ferdian; HARYONO, Stefanus Agus; LO, David; JIANG, Lingxiao. (2020.0). *2020 36th IEEE International Conference on Software Maintenance and Evolution (ICSME): Sep 27 - Oct 3, Adelaide, Australia: Proceedings,* (pp. 70-80) Piscataway, NJ: IEEE. https://doi.org/10.1109/ICSME46990.2020.00017 (Published)

How (not) to find bugs: The interplay between merge conflicts, co-changes, and bugs, by AMARAL, Luis Henrique Vieira; OLIVEIRA, Marcos C.; LUZ, Welder Pinheiro; FORTES, José; BONIFACIO, Rodrigo; ALENCAR, Daniel; MONTEIRO, Eduardo; PINTO, Gustavo; LO, David. (2020.0). *2020 36th IEEE International Conference on Software Maintenance and Evolution (ICSME): September 27- October 3, Adelaide, Virtual: Proceedings,* (pp. 441-452) Los Alamitos, CA: IEEE Computer Society. https://doi.org/10.1109/ICSME46990.2020.00049 (Published)

Prevalence, contents and automatic detection of KL-SATD, by RANTALA, Leevi; MANTYLA, Mika; LO, David. (2020.0). *2020 46th Euromicro Conference on Software Engineering and Advanced Applications (SEAA): 26-28 August, Portoroz, Slovenia: Proceedings,* (pp. 385-388) Piscataway, NJ: IEEE. https://doi.org/10.1109/SEAA51224.2020.00069 (Published)

Sentiment analysis over collaborative relationships in open source software projects, by LI, Lingjia; CAO, Jian; LO, David. (2020.0). *Proceedings of the International Conference on Software Engineering and Knowledge Engineering, SEKE 2020: Virtual, July 9-19,* (pp. 418-423) Pittsburgh: Knowledge Systems Institute Graduate School. https://doi.org/10.18293/SEKE2020-030 (Published)

CC2Vec: Distributed representations of code changes, by HOANG, Thong; KANG, Hong Jin; LAWALL, Julia; LO, David. (2020.0). *ICSE '20: Proceedings of the 42nd ACM/IEEE International Conference on Software Engineering: June 27 - July 19, Seoul,* (pp. 518-529) New York: ACM. https://doi.org/10.1145/3377811.3380361 (Published)

Keen2Act: Activity recommendation in online social collaborative platforms, by LEE, Roy Ka-Wei; HOANG, Thong; OENTARYO, Richard J.; LO, David. (2020.0). *UMAP '20: Proceedings of the 28th ACM Conference on User Modeling, Adaptation and Personalization: July 12-18, Genoa, Virtual,* (pp. 308-312) New York: ACM. https://doi.org/10.1145/3340631.3394884 (Published)

Automatic Android deprecated-API usage update by learning from single updated example, by HARYONO, Stefanus A.; THUNG, Ferdian; KANG, Hong Jin; SERRANO, Lucas; MULLER, Gilles; LAWALL, Julia; LO, David; JIANG, Lingxiao. (2020.0). *ICPC '20: Proceedings of the 28th IEEE/ACM International Conference on Program Comprehension: 13-15 July, Seoul,* (pp. 401-405) New York: ACM. https://doi.org/10.1145/3387904.3389285 (Published)

SPINFER: Inferring semantic patches for the Linux kernel, by SERRANO, Lucas; NGUYEN, Van-Anh; THUNG,

Ferdian; JIANG, Lingxiao; LO, David; LAWALL, Julia; MULLER, Gilles. (2020.0). *Proceedings of the USENIX Annual Technical Conference (USENIX ATC 2020): July 15-17, Virtual,* (pp. 1-14) Boston: USENIX Association. https://www.usenix.org/conference/atc20/presentation/serrano (Published)

Is using deep learning frameworks free?: Characterizing technical debt in deep learning frameworks, by LIU, Jiakun; HUANG, Qiao; XIA, Xin; SHIHAB, Emad; LO, David; LI, Shanping. (2020.0). *ICSE-SEIS '20: Proceedings of the ACM/IEEE 42nd International Conference on Software Engineering: Software Engineering in Society: 6-11 July, Seoul, South Korea,* (pp. 1-10) New York: ACM. https://doi.org/10.1145/3377815.3381377 (Published)

Mining and predicting micro-process patterns of issue resolution for open source software projects, by WANG, Yiran; CAO, Jian; LO, David. (2020.0). *Proceedings of the 32nd International Conference on Software Engineering and Knowledge Engineering (SEKE 2020): July 9-19, Virtual,* (pp. 477-482) Pittsburgh: Knowledge Systems Institute Graduate School. https://doi.org/10.18293/SEKE2020-031 (Published)

A machine learning approach for vulnerability curation, by CHEN, Yang; SANTOSA, Andrew E.; ANG, Ming Yi; SHARMA, Abhishek; SHARMA, Asankhaya; LO, David. (2020.0). *MSR '20: Proceedings of the 17th IEEE/ACM International Conference on Mining Software Repositories, Virtual, Seoul, June 29-30,* (pp. 32-42) New York: ACM. https://doi.org/10.1145/3379597.3387461 (Published)

Automated identification of libraries from vulnerability data, by YANG, Chen; SANTOSA, Andrew; SHARMA, Asankhaya; LO, David. (2020.0). *ICSE '20: Proceedings of the 42nd ACM/IEEE International Conference on Software Engineering: 24 June - 16 July, Seoul, Virtual,* (pp. 90-99) New York: ACM. https://doi.org/10.1145/3377813.3381360 (Published)

Distinguishing similar design pattern instances through temporal behavior analysis, by XIONG, Renhao; LO, David; LI, Bixin. (2020.0). *2020 27th IEEE International Conference on Software Analysis, Evolution and Reengineering (SANER): February 18-21, Ontario, Canada: Proceedings,* (pp. 296-307) Piscataway, NJ: IEEE. https://doi.org/10.1109/SANER48275.2020.9054804 (Published)

AUSearch: Accurate API usage search in Github repositories with type resolution, by ASYROFI, Muhammad Hilmi; THUNG, Ferdian; LO, David; JIANG, Lingxiao. (2020.0). *2020 27th IEEE International Conference on Software Analysis, Evolution and Reengineering (SANER): 18-21 February, Ontario, Canada: Proceedings,* (pp. 637-641) Piscataway, NJ: IEEE. https://doi.org/10.1109/SANER48275.2020.9054809 (Published)

Automated deprecated-API usage update for Android apps: How far are we?, by THUNG, Ferdian; HARYONO, Stefanus Agus; SERRANO, Lucas; MULLER, Gilles; LAWALL, Julia; LO, David; JIANG, Lingxiao. (2020.0). *2020 27th IEEE International Conference on Software Analysis, Evolution and Reengineering (SANER): 18-21 February, Ontario, Canada: Proceedings,* (pp. 602-611) Piscataway, NJ: IEEE. https://doi.org/10.1109/SANER48275.2020.9054860 (Published)

Assessing the generalizability of code2vec token embeddings, by JIN, Kang Hong; BISSYANDE, Tegawende F.; LO, David. (2019.0). *2019 34th ACM/IEEE International Conference on Automated Software Engineering: San Diego, November 11-15: Proceedings,* (pp. 1-12) Piscataway, NJ: IEEE. https://doi.org/10.1109/ASE.2019.00011 (Published)

Automating app review response generation, by GAO, Cuiyun; ZENG, Jichuan; XIA, Xin; LO, David; LYU, Michael; KING, Irwin. (2019.0). *Proceedings of the 34th ACM/IEEE International Conference on Automated Software Engineering, ASE 2019,* San Diego, USA: (Published)

Automatic generation of pull request descriptions, by LIU, Zhongxin; XIA, Xin; TREUDE, Christoph; LO, David; LI, Shanping. (2019.0). *ASE '19: Proceedings of the 34th ACM/IEEE International Conference on Automated Software Engineering, San Diego, November 11-15,* (pp. 176-188) New York: ACM. https://doi.org/10.1109/ASE.2019.00026 (Published)

SAFFRON: Adaptive grammar-based fuzzing for worst-case analysis, by LE, Xuan Bach D.; PASAREANU, Corina; PADHYE, Rohan; LO, David; VISSER, Willem; SEN, Koushik. (2019.0). *Proceedings of the 34th ACM/IEEE International Conference on Automated Software Engineering, ASE 2019, San Diego, USA, 2019 November 11-15,* (pp. 1-5) San Diego, USA: ACM. https://doi.org/10.1145/3364452.3364455 (Published)

Statistical log differencing, by BAO, Lingfeng; BUSANY, Nimrod; LO, David; MAOZ, Shahar. (2019.0). *ASE '19: Proceedings of the 34th ACM/IEEE International Conference on Automated Software Engineering, San Diego, November 11-15,* (pp. 851-862) New York: ACM. https://doi.org/10.1109/ASE.2019.00084 (Published)

SmartEmbed: A tool for clone and bug detection in smart contracts through structural code embedding, by GAO, Zhipeng; JAYASUNDARA, Vinoj; JIANG, Lingxiao; XIA, Xin; LO, David; GRUNDY, John. (2019.0). *Proceedings of the 35th IEEE International Conference on Software Maintenance and Evolution (ICSME): September 30 - October 4, Cleveland, USA,* (pp. 1-4) Piscataway, NJ: IEEE. (Published)

Towards generating transformation rules without examples for android API replacement, by THUNG, Ferdian; KANG, Hong Jin; JIANG, Lingxiao; LO, David. (2019.0). *2019 35th IEEE International Conference on Software Maintenance and Evolution (ICSME): Cleveland, OH, September 30 - October 4: Proceedings,* (pp. 213-217) Piscataway, NJ: IEEE. https://doi.org/10.1109/ICSME.2019.00032 (Published)

BIKER: A tool for Bi-information source based API method recommendation, by CAI, Liang; WANG, Haoye; HUANG, Qiao; XIA, Xin; XING, Zhenchang; LO, David. (2019.0). *Proceedings of the 27th ACM Joint Meeting on European Software Engineering Conference and Symposium on the Foundations of Software Engineering,Tallinn, Estonia, 2019 August 26-30,* (pp. 1075-1079) Tallinn, Estonia: https://doi.org/10.1145/3338906.3341174 (Published)

AnswerBot: An answer summary generation tool based on Stack Overflow, by CAI, Liang; WANG, Haoye; XU, Bowen; HUANG, Qiao; XIA, Xin; LO, David; XING, Zhenchang. (2019.0). *ESEC/FSE '19: Proceedings of the 27th ACM Joint Meeting on European Software Engineering Conference and Symposium on the Foundations of Software Engineering, Tallinn, Estonia, August 26-30,* (pp. 1134-1138) New York: ACM. https://doi.org/10.1145/3338906.3341186 (Published)

InSPeCT: Iterated local search for solving path conditions, by CHEN, Fuxiang; GUNAWAN, Aldy; LO, David; KIM, Sunghun. (2019.0). *2019 15th IEEE International Conference on Automation Science and Engineering (CASE): Vancouver, August 22-26: Proceedings,* (pp. 1724-1729) Piscataway, NJ: IEEE. https://doi.org/10.1109/COASE.2019.8843039 (Published)

Semantic patches for Java program transformation, by KANG, Hong Jin; THUNG, Ferdian; LAWALL, Julia; MULLER, Gilles; JIANG, Lingxiao; LO, David. (2019.0). *33rd European Conference on Object-Oriented Programming (ECOOP 2019), London, 2019 July 15-19,* (pp. 22:1-22:27) Dagstuhl: Dagstuhl Publishing. https://doi.org/10.4230/LIPIcs.ECOOP.2019.22 (Published)

Semantic patches for Java program transformation (artifact), by KANG, Hong Jin; THUNG, Ferdian; LAWALL, Julia; MULLER, Gilles; JIANG, Lingxiao; LO, David. (2019.0). *Proceedings of the 33rd European Conference on Object-Oriented Programming (ECOOP 2019): London, July 15-19,* Dagstuhl: Dagstuhl Publishing. https://doi.org/10.4230/DARTS.3.2.1 (Published)

How practitioners perceive coding proficiency, by XIA, Xin; WAN, Zhiyuan; KOCHHAR, Pavneet S.; LO, David. (2019.0). *Proceedings of the 41st ACM/IEEE International Conference on Software Engineering (ICSE 2019), Montreal, Canada, May 25-31,* (pp. 1-12) Montreal, Canada: https://doi.org/10.1109/ICSE.2019.00098 (Published)

PatchNet: A tool for deep patch classification, by HOANG, Thong; LAWALL, Julia; OENTARYO, Richard J.; TIAN, Yuan; LO, David. (2019.0). *41st IEEE/ACM International Conference on Software Engineering: ICSE-Companion 2019: Montreal, 25-31 May: Proceedings,* (pp. 83-86) Piscataway, NJ: IEEE. https://doi.org/10.1109/ICSE-Companion.2019.00044 (Published)

Practitioners' views on good software testing practices, by KOCHHAR, Pavneet S.; XIA, Xin; LO, David. (2019.0). *Proceedings of the 41st ACM/IEEE International Conference on Software Engineering (ICSE 2019), Montreal, Canada, 2019 May 25-31,* (pp. 61-70) Montreal, Canada: https://doi.org/10.1109/ICSE-SEIP.2019.00015 (Published)

Emerging app issue identification from user feedback: Experience on WeChat, by GAO, Cuiyun; ZHENG, Wujie; DENG, Yuetang; LO, David; ZENG Jichuan; LYU, Michael R.; KING, Irwin. (2019.0). *Proceedings of the 41st ACM/IEEE International Conference on Software Engineering (ICSE 2019), Montreal, Canada, 2019 May 25-31,* (pp. 279-288) Montreal, Canada: https://doi.org/10.1109/ICSE-SEIP.2019.00040 (Published)

On reliability of patch correctness assessment, by LE, Xuan-Bach D.; BAO, Lingfeng; LO, David; XIA, Xin; LI, Shanping; PASAREANU, Corina S.. (2019.0). *2019 IEEE/ACM 41st International Conference on Software Engineering (ICSE): Montreal, Canada, May 25-31: Proceedings,* (pp. 524-535) Piscataway, NJ: IEEE. https://doi.org/10.1109/ICSE.2019.00064 (Published)

DeepJIT: An end-to-end deep learning framework for just-in-time defect prediction, by HOANG, Thong; DAM, Hoa Khanh; KAMEI, Yasutaka; LO, David; UBAYASHI, Naoyasu. (2019.0). *2019 16th IEEE/ACM International Conference on Mining Software Repositories MSR: Montreal, Canada, May 26-27: Proceedings,* (pp. 34-45) Piscataway, NJ: IEEE. https://doi.org/10.1109/MSR.2019.00016 (Published)

DeepReview: Automatic code review using deep multi-instance learning, by LI, Hengyi; SHI, Shuting; THUNG, Ferdian; HUO, Xuan; XU, Bowen; LI, Ming; LO, David. (2019.0). *Advances in knowledge discovery and data mining: 23rd Pacific-Asia Conference, PAKDD 2019, Macau, China, April 14-17: Proceedings,* (pp. 318-330) Cham: Springer. https://doi.org/10.1007/978-3-030-16145-3_25 (Published)

Automatic code review by learning the revision of source code, by SHI, Shu-Ting; LI, Ming; LO, David; THUNG, Ferdian; HUO, Xuan. (2019.0). *Proceedings of the 33rd AAAI Conference on Artificial Intelligence (AAAI 2019), Honolulu, Hawaii, January 27 - February 1,* (pp. 4910-4917) Honolulu, Hawaii: https://doi.org/10.1609/aaai.v33i01.33014910 (Presented)

Towards mining comprehensive Android sandboxes, by LE, Tien-Duy B.; BAO, Lingfeng; LO, David; GAO, Debin; LI, Li. (2018.0). *ICECCS 2018: 23rd International Conference on Engineering of Complex Computer Systems: Proceedings : 12-14 December, Melbourne, Australia,* (pp. 51-60) Los Alamitos, CA: IEEE Computer Society. https://doi.org/10.1109/ICECCS2018.2018.00014 (Published)

PerfLearner: Learning from bug reports to understand and generate performance test frames, by HAN, Xue; YU, Tingting; LO, David. (2018.0). *ASE 2018: Proceedings of the 33rd ACM/IEEE International Conference on Automated Software Engineering, Montpellier, France, September 3-7,* (pp. 17-28) New York: ACM. https://doi.org/10.1145/3238147.3238204 (Published)

INFAR: insight extraction from app reviews, by GAO, Cuiyun; ZENG, Jichuan; LO, David; LIN, Chin-Yew; LYU, Michael R.; KING, Irwin. (2018.0). *Proceedings of the 2018 ACM Joint Meeting on European Software Engineering Con-ference and Symposium on the Foundations of Software Engineering (ESEC/SIGSOFT FSE 2018), Lake Buena Vista, FL, USA, 2018 November 4-9,* (pp. 904-907) Lake Buena Vista, FL, USA: ACM, New York, USA. https://doi.org/10.1145/3236024.3264595 (Published)

Using finite-state models for log differencing, by AMAR, Hen; BAO, Lingfeng; BUSANY, Nimrod; LO, David; MAOZ, Shahar. (2018.0). *ESEC/FSE 2018: Proceedings of the 26th ACM Joint Meeting on European Software Engineering Conference and Symposium on the Foundations of Software Engineering, Lake Buena Vista, FL, November 4-9,* (pp. 49-59) New York: ACM. https://doi.org/10.1145/3236024.3236069 (Published)

VT-Revolution: Interactive programming tutorials made possible, by BAO, Lingfeng; XING, Zhenchang; XIA, Xin; LO, David; LI, Shanping. (2018.0). *ESEC/FSE 2018: Proceedings of the 2018 ACM Joint Meeting on European Software Engineering Con-ference and Symposium on the Foundations of Software Engineering: Lake Buena Vista, Florida, November 4-9,* (pp. 924-927) New York: ACM. https://doi.org/10.1145/3236024.3264587 (Published)

DSM: A specification mining tool using recurrent neural network based language model, by LE, Tien-Duy B.; BAO, Lingfeng; LO, David. (2018.0). *ESEC/FSE 2018: Proceedings of the 26th ACM Joint Meeting on European Software Engineering Conference and Symposium on the Foundations of Software Engineering, Lake Buena Vista, FL, November 4-9,* (pp. 896-899) New York: ACM. https://doi.org/10.1145/3236024.3264597 (Published)

Prediction of relatedness in stack overflow: Deep learning vs. SVM: A reproducibility study, by XU, Bowen; SHIRANI, Amirreza; LO, David; ALIPOUR, Mohammad Amin. (2018.0). *ESEM '18: Proceedings of the 12th ACM/IEEE International Symposium on Empirical Software Engineering and Measurement, Oulu, Finland, October 11-12,* (pp. 21:1-10) New York: ACM. https://doi.org/10.1145/3239235.3240503 (Published)

Neural-machine-translation-based commit message generation: how far are we?, by LIU, Zhongxin; XIA, Xin; HASSAN, Ahmed E.; LO, David; XING, Zhenchang; WANG, Xinyu. (2018.0). *Proceedings of the 33rd ACM/IEEE International Conference on Automated Software Engineering (ASE 2018), Montpellier, France, 2018 September 3-7,* (pp. 373-384) Montpellier, France: ACM, New York, USA. https://doi.org/10.1145/3238147.3238190 (Published)

API method recommendation without worrying about the task-API knowledge gap, by HUANG, Qiao; XIA, Xin; XING, Zhenchang; LO, David; WANG, Xinyu. (2018.0). *Proceedings of the 33rd ACM/IEEE International Conference on Automated Software Engineering (ASE 2018), Montpellier, France, 2018 September 3-7,* (pp. 293-304) Montpellier, France: ACM, New York, USA. https://doi.org/10.1145/3238147.3238191 (Published)

Characterizing common and domain-specific package bugs: A case study on Ubuntu, by REN, Xiaoxue; HUANG, Qiao; XIA, Xin; XING, Zhenchang; BAO, Lingfeng; LO, David. (2018.0). *Proceedings of the 42nd IEEE Annual Computer Software and Applications Conference (COMPSAC 2018), Tokyo, Japan, 2018 July 23-27,* Tokyo, Japan: https://doi.org/10.1109/COMPSAC.2018.00065 (Published)

Summarizing source code with transferred API knowledge, by HU, Xing; LI, Ge; XIA, Xin; LO, David; LU, Shuai; JIN, Zhi. (2018.0). *Proceedings of the Twenty-Seventh International Joint Conference on Artificial Intelligence (IJCAI 2018), Stockholm, Sweden, July 13-19,* (pp. 2269-2275) Stockholm, Sweden: IJCAI. https://doi.org/10.24963/ijcai.2018/314 (Published)

Deep specification mining, by LE, Tien-Duy B.; LO, David. (2018.0). *ISSTA 2018: Proceedings of the 27th ACM SIGSOFT International Symposium on Software Testing and Analysis Amsterdam, Netherlands, July 16-18,* (pp. 106-117) New York: ACM. https://doi.org/10.1145/3213846.3213876 (Published)

SATD detector: A text-mining-based self-admitted technical debt detection tool, by LIU, Zhongxin; HUANG, Qiao; XIA, Xin; SHIHAB, Emad; LO, David; LI, Shanping. (2018.0). *ICSE 2018: Proceedings of the 40th ACM/IEEE International Conference on Software Engineering: Gothenburg, Sweden, May 27 - June 3,* (pp. 9-12) New York: ACM. https://doi.org/10.1145/3183440.3183478 (Published)

Wisdom in sum of parts: Multi-platform activity prediction in social collaborative sites, by LEE, Roy Ka-Wei; LO, David. (2018.0). *WebSci '18: Proceedings of the 10th ACM Conference on Web Science, Amsterdam, Netherlands, May 27-30,* (pp. 77-86) New York: ACM. https://doi.org/10.1145/3201064.3201067 (Published)

Analyzing requirements and traceability information to improve bug localization, by RATH, Michael; LO, David; MADER, Patrick. (2018.0). *Proceedings of the 15th International Conference on Mining Software Repositories (MSR 2018), Gothenburg, Sweden, 2018 May 28-29,* (pp. 442-453) Gothenburg, Sweden: ACM, New York, USA. https://doi.org/10.1145/3196398.3196415 (Published)

Recommending frequently encountered bugs, by ZHANG, Yun; LO, David; XIA, Xin; JIANG, Jing; SUN, Jianling. (2018.0). *Proceedings of the 26th Conference on Program Comprehension (ICPC 2018), Gothenburg, Sweden, 2018 May 27-28,* (pp. 120-131) Gothenburg, Sweden: ACM, New York, USA. https://doi.org/10.1145/3196321.3196348 (Published)

Deep code comment generation, by HU, Xing; LI, Ge; XIA, Xin; LO, David; JIN, Zhi. (2018.0). *ICPC '18: Proceedings of the 26th Conference on Program Comprehension, Gothenburg, Sweden, May 27-28,* (pp. 200-210) New York: ACM. https://doi.org/10.1145/3196321.3196334 (Published)

Mining sandboxes: Are we there yet?, by BAO, Lingfeng; LE, Tien-Duy B.; LO, David. (2018.0). *2018 IEEE 25th International Conference on Software Analysis, Evolution and Reengineering (SANER): Campobasso, Italy, March 20-23: Proceedings,* (pp. 445-455) Los Alamitos, CA: IEEE Computer Society. https://doi.org/10.1109/SANER.2018.8330231 (Published)

The impact of coverage on bug density in a large industrial software project, by BACH, Thomas; ANDRZEJAK, Artur; PANNEMANS, Ralf; LO, David. (2017.0). *ESEM 2017: Proceedings of 11th ACM/IEEE International Symposium on Empirical Software Engineering and Measurement: Toronto, Canada, November 9-10,* (pp. 303-313) Piscataway, NJ: IEEE. https://doi.org/10.1109/ESEM.2017.44 (Published)

File-level defect prediction: Unsupervised vs. supervised models, by YAN, Meng; FANG, Yicheng; LO, David; XIA, Xin; ZHANG, Xiaohong. (2017.0). *Proceedings of ACM/IEEE International Symposium on Empirical Software Engineering and Measurement (ESEM 2017),* Toronto, Canada: IEEE. http://doi.org/10.1109/ESEM.2017.48 (Published)

AnswerBot: Automated generation of answer summary to developers' technical questions, by XU, Bowen; XING, Zhenchang; XIA, Xin; LO, David. (2017.0). *ASE'17: Proceedings of the 32nd IEEE/ACM International Conference on Automated Software Engineering: Urbana-Champaign, IL, October 30-November 3,* (pp. 706-716) Piscataway, NJ: IEEE. https://doi.org/10.1109/ASE.2017.8115681 (Published)

APIBot: Question answering bot for API documentation, by TIAN, Yuan; THUNG, Ferdian; SHARMA, Abhishek; LO, David. (2017.0). *ASE 2017: Proceedings of the 32nd IEEE/ACM International Conference on Automated Software Engineering, Urbana-Champaign, IL, October 30 - November 3,* (pp. 153-158) Piscataway, NJ: IEEE. https://doi.org/10.1109/ASE.2017.8115628 (Published)

Which packages would be affected by this bug report?, by HUANG, Qiao; LO, David; XIA, Xin; WANG, Qingye; LI, Shanping. (2017.0). *Proceedings of 28th IEEE International Symposium on Software Reliability Engineering (ISSRE 2017),* Toulouse, France: IEEE Computer Society. http://doi.org/10.1109/ISSRE.2017.24 (Published)

Personality and project success: Insights from a large-scale study with professionals, by XIA, Xin; LO, David; BAO, Lingfeng; SHARMA, Abhishek; LI, Shanping. (2017.0). *Proceedings of 2017 IEEE International*

Conference on Software Maintenance and Evolution (ICSME 2017), Shanghai, China: IEEE Computer Society. http://doi.org/10.1109/ICSME.2017.50 (Published)

Supervised vs unsupervised models: A holistic look at effort-aware just-in-time defect prediction, by HUANG, Qiao; XIA, Xin; LO, David. (2017.0). *Proceedings of 2017 IEEE International Conference on Software Maintenance and Evolution (ICSME 2017),* Shanghai, China: IEEE. http://doi.org/10.1109/ICSME.2017.51 (Published)

GitHub and Stack Overflow: Analyzing developer interests across multiple social collaborative platforms, by LEE, Roy Ka-Wei; LO, David. (2017.0). *Social informatics: 9th International Conference, SocInfo 2017, Oxford, UK, September 13-15: Proceedings,* (pp. 246-256) Cham: Springer. https://doi.org/10.1007/978-3-319-67256-4_19 (Published)

VuRLE: Automatic vulnerability detection and repair by learning from examples, by MA, Siqi; THUNG, Ferdian; LO, David; SUN, Cong; DENG, Robert H.. (2017.0). *Computer security ESORICS 2017: 22nd European Symposium on Research in Computer Security, Oslo, Norway, September 11-15: Proceedings,* (pp. 229-246) Cham: Springer. https://doi.org/10.1007/978-3-319-66399-9_13 (Published)

Inferring spread of readers' emotion affected by online news, by SULISTYA, Agus; THUNG, Ferdian; LO, David. (2017.0). *Social informatics: 9th International Conference, SocInfo 2017, Oxford, UK, September 13-15: Proceedings,* (pp. 426-439) Cham: Springer. https://doi.org/10.1007/978-3-319-67217-5_26 (Published)

XSearch: A domain-specific cross-language relevant question retrieval tool, by XU, Bowen; XING, Zhenchang; XIA, Xin; LO, David; LE, Xuan-Bach D. (2017.0). *ESEC/FSE '17: Proceedings of the 2017 11th Joint Meeting on Foundations of Software Engineering: Paderborn, Germany, September 4-8,* (pp. 1009-1013) New York: ACM. https://doi.org/10.1145/3106237.3122820 (Published)

S3: Syntax- and semantic-guided repair synthesis via programming by examples, by LE, Xuan-Bach D.; CHU, Duc-Hiep; LO, David; GOUES, Claire Le; VISSER, Willem. (2017.0). *ESEC/FSE 2017: Proceedings of the 11th Joint Meeting on European Software Engineering Conference and ACM SIGSOFT Symposium on Foundations of Software Engineering, Paderborn, Germany, September 4-8,* (pp. 593-604) New York: ACM. https://doi.org/10.1145/3106237.3106309 (Published)

A critical evaluation of spectrum-based fault localization techniques on a large-scale software system, by KELLER, Fabian; GRUNSKE, Lars; HEIDEN, Simon; FILIERI, Antonio; HOORN, Andre Van; LO, David. (2017.0). *Proceedings of the 2017 IEEE International Conference on Software Quality, Reliability and Security (QRS),* Prague; Czech Republic: http://doi.org/10.1109/QRS.2017.22 (Published)

JFIX: Semantics-based repair of Java programs via symbolic PathFinder, by LE, Xuan Bach D.; CHU, Duc-Hiep; LO, David; LE, GOUES, Claire; VISSER, Willem. (2017.0). *ISSTA 2017 Proceedings of the 26th ACM SIGSOFT International Symposium on Software Testing and Analysis,* New York: ACM. http://doi.org/10.1145/3092703.3098225 (Published)

Automatically locating malicious packages in piggybacked Android apps, by LI, Li; LI, Daoyuan; BISSYANDE, Tegawende; KLEIN, Jacques; CAI, Haipeng; LO, David; LE TRAON, Yves. (2017.0). *2017 IEEE/ACM 4th International Conference on Mobile Software Engineering and Systems (MOBILESoft),* Buenos Aires, Argentina: IEEEE. http://doi.org/10.1109/MOBILESoft.2017.6 (Published)

RACK: Code search in the IDE using crowdsourced knowledge, by RAHMAN, Mohammad Masudur; ROY, Chanchal K.; LO, David. (2017.0). *2017 IEEE/ACM 39th International Conference on Software Engineering Companion (ICSE-C),* Buenos Aires, Argentina: IEEE. http://doi.org/10.1109/ICSE-C.2017.11 (Published)

Bug characteristics in blockchain systems: A large-scale empirical study, by WAN, Zhiyuan; LO, David; XIA, Xin; CAI, Liang. (2017.0). *2017 IEEE/ACM 14th International Conference on Mining Software Repositories (MSR),* Buenos Aires, Argentina: http://doi.org/10.1109/MSR.2017.59 (Published)

Measuring the declared SDK versions and their consistency with API calls in android apps, by WU, Daoyan; LIU, Ximing; XU, Jiayun; LO, David; GAO, Debin. (2017.0). *Wireless Algorithms, Systems, and Applications: Proceedings of the 12th International Conference, WASA 2017, Guilin, China, June 19-21,* (pp. 678-690) Cham: Springer. https://doi.org/10.1007/978-3-319-60033-8_58 (Published)

An exploratory study of functionality and learning resources of web APIs on Programmableweb, by TIAN, Yuan; KOCHHAR, Pavneet Singh; LO, David. (2017.0). *EASE '17: Proceedings of the 21st International Conference on Evaluation and Assessment in Software Engineering, Karlskrona, Sweden, June 15-16,* (pp. 202-207) New York: ACM. https://doi.org/10.1145/3084226.3084286 (Published)

Cataloging GitHub repositories, by SHARMA, Abhishek; THUNG, Ferdian; KOCHHAR, Pavneet Singh; SULISTYA, Agus; LO, David. (2017.0). *EASE'17 Proceedings of the 21st International Conference on Evaluation and Assessment in Software Engineering, New York, 2017 June 15-16,* (pp. 314-319) Karlskrona: Association for Computing Machinery. http://doi.org/10.1145/3084226.3084287 (Published)

Revisiting assert use in GitHub projects, by KOCHHAR, Pavneet Singh; LO, David. (2017.0). *EASE'17 Proceedings of the 21st International Conference on Evaluation and Assessment in Software Engineering, Karlskrona, Sweden, 2017 June 15-16,* (pp. 298-307) Karlskrona: Association for Computing Machinery. http://doi.org/10.1145/3084226.3084259 (Published)

Who will leave the company?: A large-scale industry study of developer turnover by mining monthly work report, by BAO, Lingfeng; XING, Zhenchang; XIA, Xin; LO, David; LI, Shanping. (2017.0). *2017 IEEE/ACM 14th International Conference on Mining Software Repositories (MSR): Buenos Aires, Argentina, May 20-21: Procceedings,* (pp. 170-181) Los Alamitos, CA: IEEE Computer Society. https://doi.org/10.1109/MSR.2017.58 (Published)

Empirical study of usage and performance of java collections, by COSTA, Diego; ANDRZEJAK, Artur; SEBOEK, Janos; LO, David. (2017.0). *Proceedings of the 8th ACM/SPEC International Conference on Performance Engineering,* L'Aquila, Italy: (Published)

Mining sandboxes for Linux containers, by WAN, Zhiyuan; LO, David; XIA, Xin; CAI, Liang; LI, Shanping. (2017.0). *10th IEEE International Conference on Software Testing (ICST 2017): Toyko, Japan, March, 13-17: Proceedings,* (pp. 92-102) Los Alamitos, CA: IEEE Computer Society. https://doi.org/10.1109/ICST.2017.16 (Published)

Harnessing Twitter to support serendipitous learning of developers, by SHARMA, Abhishek; TIAN, Yuan; SULISTYA, Agus; LO, David; YAMASHITA, Aiko. (2017.0). *SANER 2017: 24th IEEE International Conference on Software Analysis, Evolution, and Reengineering: Klagenfurt, Austria, February 21-24,* (pp. 387-391) Piscataway, NJ: IEEE. https://doi.org/10.1109/SANER.2017.7884639 (Published)

Detecting similar repositories on GitHub, by ZHANG, Yun; LO, David; KOCHHAR, Pavneet Singh; XIA, Xin; LI, Quanlai; SUN, Jianling. (2017.0). *SANER 2017: Proceedings of 24th IEEE International Conference on Software Analysis, Evolution and Reengineering: Klagenfurt, Austria, February 20-24, 2017,* (pp. 1-10) Piscataway, NJ: IEEE. http://doi.org/10.1109/SANER.2017.7884605 (Published)

CareerMapper: An automated resume evaluation tool, by LAI, Vivian; SHIM, Kyong Jin; OENTARYO, Richard Jayadi; PRASETYO, Philips Kokoh; VU, Casey; LIM, Ee Peng; LO, David. (2016.0). *BigData 2016: Proceedings of the 4th IEEE International Conference on Big Data: Washington DC, December 5-8,* (pp. 4005-4007) Piscataway, NJ: IEEE. https://doi.org/10.1109/BigData.2016.7841091 (Published)

Semi-automated tool for providing effective feedback on programming assignments, by BEH, Min Yan; GOTTIPATI, Swapna; LO, David; SHANKARARAMAN, Venky. (2016.0). *Proceedings of the 24th International Conference on Computers in Education: November 28 - December 2, 2016, Mumbai, India,* (pp. 258-263) Taoyuan City: Asia-Pacific Society for Computers in Education. (Published)

Spiteful, one-off, and kind: Predicting customer feedback behavior on Twitter, by SULISTYA, Agus; SHARMA, Abhishek; LO, David. (2016.0). *Social Informatics: 8th International Conference, SocInfo 2016, Bellevue, WA, November 11-14, Proceedings,* (pp. 368-381) Cham: Springer. https://doi.org/10.1007/978-3-319-47874-6_26 (Published)

What permissions should this android app request?, by BAO, Lingfeng; LO, David; XIA, Xin; LI, Shanping. (2016.0). *SATE 2016: Proceedings of International Conference on Software Analysis, Testing and Evolution: Proceedings: Kunming, November 3-4, 2016,* Piscataway, NJ: IEEE. https://doi.org/10.1109/SATE.2016.13 (Published)

ORPLocator: Identifying read points of configuration options via static analysis, by DONG, Zhen; ANDRZEJAK, Artur; LO, David; COSTA, Diego. (2016.0). *ISSRE 2016: Proceedings of the 27th IEEE International Symposium on Software Reliability Engineering: Ottawa, October 23-27, 2016,* (pp. 185-195) Piscataway, NJ: IEEE. http://doi.org/10.1109/ISSRE.2016.37 (Published)

Combining word embedding with information retrieval to recommend similar bug reports, by YANG, Xinli; LO, David; XIA, Xin; BAO, Lingfeng; SUN, Jianling. (2016.0). *ISSRE 2016: Proceedings of the 27th IEEE International Symposium on Software Reliability Engineering: Ottawa, October 23-27, 2016,* (pp. 127-137) Piscataway, NJ: IEEE. https://doi.org/10.1109/ISSRE.2016.33 (Published)

Empirical study on synthesis engines for semantics-based program repair, by BACH, Le Dinh Xuan; LO, David; GOUES, Claire Le. (2016.0). *2016 IEEE International Conference on Software Maintenance and Evolution: ICSME 2016: 2-10 October 2016, Raleigh: Proceedings,* Piscataway, NJ: IEEE. http://doi.org/10.1109/ICSME.2016.68 (Published)

Inferring links between concerns and methods with multi-abstraction vector space model, by ZHANG, Yun; LO, David; XIA, Xin; LE, Tien-Duy B.; SCANNIELLO, Giuseppe; SUN, Jianling. (2016.0). *2016 IEEE International Conference on Software Maintenance and Evolution: ICSME 2016: Proceedings, 2-10 October 2016, Raleigh, North Carolina,* (pp. 110-121) Los Alamitos, CA: IEEE Computer Society. https://doi.ieeecomputersociety.org/10.1109/ICSME.2016.51 (Published)

Enhancing automated program repair with deductive verification, by BACH, Le Dinh Xuan; LE, Quang Loc; LO, David; GOUES, Claire Le. (2016.0). *2016 IEEE International Conference on Software Maintenance and Evolution: ICSME 2016: 2-10 October 2016, Raleigh: Proceedings,* Piscataway, NJ: IEEE. http://doi.org/10.1109/ICSME.2016.66 (Published)

"Automated debugging considered harmful" considered harmful: A user study revisiting the usefulness of spectra-based fault localization techniques with professionals using real bugs from large systems, by XIA, Xin; BAO, Lingfeng; LO, David; LI, Shanping. (2016.0). *Proceedings of the 32nd IEEE International Conference on Software Maintenance and Evolution (ICSME 2016): Raleigh, NC, 2-7 October 2016,* Piscataway, NJ: IEEE. http://doi.org/10.1109/ICSME.2016.67 (Published)

Recommending code changes for automatic backporting of Linux device drivers, by THUNG, Ferdian; LE, Xuan-Bach D.; LO, David, LAWALL, Julia. (2016.0). *ICSME 2016: Proceedings of the 32nd IEEE International Conference on Software Maintenance and Evolution, Raleigh, NC, October 2-7,* (pp. 222-232) Piscataway, NJ: IEEE. https://doi.org/10.1109/ICSME.2016.71 (Published)

Predicting crashing releases of mobile applications, by XIA, Xin; SHIHAB, Emad; KAMEI, Yasutaka; LO, David; WANG, Xinyu. (2016.0). *ESEM '16: Proceedings of the 10th ACM/IEEE International Symposium on Empirical Software Engineering and Measurement: Ciudad Real, Spain, September 8-9, 2016,* New York: ACM. http://doi.org/10.1145/2961111.2962606 (Published)

How practitioners perceive the relevance of ESEM research, by CARVER, Jeffrey C.; DIESTE, Oscar; KRAFT, Nicholas A.; LO, David; ZIMMERMANN, Thomas. (2016.0). *ESEM '16: Proceedings of the 10th ACM/IEEE International Symposium on Empirical Software Engineering and Measurement: Ciudad Real, Spain, September 8-9, 2016,* New York: ACM. http://doi.org/ 10.1145/2961111.2962597 (Published)

A learning-to-rank based fault localization approach using likely invariants, by LE, Tien-Duy B.; LO, David; LE GOUES, Claire; GRUNSKE, Lars. (2016.0). *ISSTA 2016: Proceedings of the 25th International Symposium on Software Testing and Analysis: July 18-20, Saarbrücken, Germany,* (pp. 177-188) New York: ACM. https://doi.org/10.1145/2931037.2931049 (Published)

Practitioners' expectations on automated fault localization, by KOCHHAR, Pavneet Singh; XIA, Xin; LO, David; LI, Shanping. (2016.0). *Proceedings of the 25th ACM International Symposium on Software Testing and Analysis: ISSTA 2016, Saarbrucken, Germany; 2016 July 18-20,* Saarbrucken, Germany: Association for Computing Machinery, Inc. http://doi.org/10.1145/2931037.2931051 (Published)

Condensing class diagrams with minimal manual labeling cost, by YANG, Xinli; LO, David; XIA, Xin; SUN, Jianling. (2016.0). *COMPSAC 2016: Proceedings of the 40th IEEE Annual International Computers, Software and Applications Conference, Atlanta, Georgia, 10-14 June 2016,* (pp. 22-31) Los Alamitos, CA: IEEE Computer Society. http://doi.org/10.1109/COMPSAC.2016.83 (Published)

Automated identification of high impact bug reports leveraging imbalanced learning strategies, by YANG, Xinli; LO, David; HUANG, Qiao; XIA, Xin; SUN, Jianling. (2016.0). *COMPSAC 2016: Proceedings of the 40th IEEE Annual International Computers, Software and Applications Conference, Atlanta, Georgia, 10-14 June,* (pp. 227-232) Los Alamitos, CA: IEEE Computer Society. https://doi.org/10.1109/COMPSAC.2016.67 (Published)

It takes two to tango: Deleted Stack Overflow question prediction with text and meta features, by XIA, Xin; LO, David; CORREA, Denzil; SUREKA, Ashish; SHIHAB, Emad. (2016.0). *COMPSAC 2016: Proceedings of the 40th IEEE Annual International Computers, Software and Applications Conference: Atlanta, Georgia, 10-14 June 2016,* (pp. 73-82) Los Alamitos, CA: IEEE Computer Society. http://doi.org/10.1109/COMPSAC.2016.145 (Published)

CDRep: Automatic repair of cryptographic-misuses in Android applications, by MA, Siqi; LO, David; LI, Teng; DENG, Robert H.. (2016.0). *ASIA CCS '16: Proceedings of the 11th ACM Asia Conference on*

Computer and Communications Security: May 30 - June 3, Xi'an, China, (pp. 711-722) New York: ACM. https://doi.org/10.1145/2897845.2897896 (Published)

Software analytics: Challenges and opportunities, by GUERROUJ, Latifa; BAYSAL, Olga; LO, David; KHOMH, Foutse. (2016.0). *2016 IEEE/ACM 38th IEEE International Conference on Software Engineering ICSE 2016 proceedings, Austin, Texas, USA, 2016, May 14 - 22,* Piscataway, NJ: IEEE. http://worldcat.org/isbn/9781450339001 (Published)

Learning to rank for bug report assignee recommendation, by TIAN Yuan; WIJEDASA, Dinusha; LO, David; LE GOUES, Claire. (2016.0). *2016 24th IEEE International Conference on Program Comprehension: ICPC: Proceedings: May 16-17, Austin, TX,* (pp. 1-10) Piscataway, NJ: IEEE. https://doi.org/10.1109/ICPC.2016.7503715 (Published)

Deeper look into bug fixes: Patterns, replacements, deletions, and additions, by SOTO, Mauricio; THUNG, Ferdian; WONG, Chu-Pan; LE GOUES, Claire; LO, David. (2016.0). *Proceedings of the 2016 13th International Conference on Mining Software Repositories: May 14-15, 2016, Austin, Texas,* (pp. 512-515) Piscataway, NJ: IEEE. http://doi.org/10.1145/2901739.2903495 (Published)

How Android app developers manage power consumption? An empirical study by mining power management commits, by BAO, Lingfeng; LO, David; XIA, Xin; WANG, Xinyu; TIAN, Cong. (2016.0). *Proceedings of the 2016 13th International Conference on Mining Software Repositories: May 14-15, Austin, Texas,* (pp. 37-48) Piscataway, NJ: Association for Computing Machinery, Inc. (Published)

Domain-specific cross-language relevant question retrieval, by XU, Bowen; XING, Zhenchang; XIA, Xin; LO, David; WANG, Qingye; LI, Shanping. (2016.0). *Proceedings of the 2016 13th International Conference on Mining Software Repositories, Austin, United States, 2016 May 14-15,* (pp. 413-424) Piscataway, NJ: Association for Computing Machinery, Inc. http://doi.org/10.1145/2901739.2901746 (Published)

EFSPredictor: Predicting configuration bugs with ensemble feature selection, by XU, Bowen; LO, David; XIA, Xin; SUREKA, Ashish; LI, Shanping. (2016.0). *22nd Asia-Pacific Software Engineering Conference: APSEC 2015, New Delhi, India, 2015 December 1-4,* (pp. 206-213) New Delhi: IEEE Computer Society. http://doi.org/10.1109/APSEC.2015.38 (Published)

RACK: Automatic API recommendation using crowdsourced knowledge, by RAHMAN, Mohammad M.; ROY, Chanchal K.; LO, David. (2016.0). *2016 IEEE 23rd International Conference on Software Analysis, Evolution, and Reengineering (SANER): March 14-18, Osaka: Proceedings,* Piscataway, NJ: IEEE. http://doi.org/10.1109/SANER.2016.80 (Published)

History driven program repair, by LE, Xuan-Bach D.; LO, David; LE GOUES, Claire. (2016.0). *2016 IEEE 23rd International Conference on Software Analysis, Evolution, and Reengineering (SANER): March 14-18, Osaka: Proceedings,* (pp. 213-224) Piscataway, NJ: IEEE. https://doi.org/10.1109/SANER.2016.76 (Published)

A more accurate model for finding tutorial segments explaining APIs, by JIANG, He; ZHANG, Jingxuan; LI, Xiaochen; REN, Zhilei; LO, David. (2016.0). *2016 IEEE 23rd International Conference on Software Analysis, Evolution, and Reengineering (SANER): March 14-18, Osaka: Proceedings,* Piscataway, NJ: IEEE. http://doi.org/10.1109/SANER.2016.59 (Published)

A large scale study of multiple programming languages and code quality, by KOCHHAR; Pavneet S.; WIJEDASA, Dinusha; LO David. (2016.0). *2016 IEEE 23rd International Conference on Software Analysis, Evolution, and Reengineering (SANER): March 16-18, 2016, Osaka: Proceedings,* Piscataway, NJ: IEEE. http://doi.org/10.1109/SANER.2016.112 (Published)

Experience report: An industrial experience report on test outsourcing practices, by XIA, Xin; LO, David; KOCHHAR, Pavneet Singh; XING, Zhenchang; WANG, Xinyu; LI, Shanping. (2016.0). *26th IEEE International Symposium on Software Reliability Engineering: ISSRE 2015, Gaithersbury, United States, 2015 November 2-5,* (pp. 370-380) Gaithersbury: Institute of Electrical and Electronics Engineers Inc. http://doi.org/10.1109/ISSRE.2015.7381830 (Published)

Synergizing specification miners through model fissions and fusions, by LE, Tien-Duy B.; LE, Xuan-Bach D.; LO, David; BESCHASTNIKH, Ivan. (2015.0). *30th IEEE/ACM International Conference on Automated Software Engineering (ASE 2015),* (pp. 115-125) Lincoln, USA: Institute of Electrical and Electronics Engineers Inc. http://ddoi.org/10.1109/ASE.2015.83 (Published)

Combining software metrics and text features for vulnerable file prediction, by ZHANG, Yun; LO, David; XIA, Xin; XU, Bowen; SUN, Jianling Sun; LI, Shanping. (2015.0). *20th International Conference on*

Engineering of Complex Computer Systems (ICECCS 2015), (pp. 40-49) Gold Coast, Australia: IEEE. http://dx.doi.org/10.1109/ICECCS.2015.15 (Published)

CNL: Collective Network Linkage across heterogeneous social platforms, by GAO, Ming; LIM, Ee Peng; LO, David; ZHU, Feida; PRASETYO, Philips Kokoh; ZHOU, Aoying. (2015.0). *IEEE International Conference on Data Mining ICDM 2015: November 14-17, 2015, Atlantic City: Proceedings,* (pp. 757-762) Piscataway, NJ: IEEE. http://doi.org/10.1109/ICDM.2015.34 (Published)

Experience report: An industrial experience report on test outsourcing practices, by XIA, Xin; LO, David; KOCHHAR, Pavneet S.; XING, Zhenchang; WANG, Xinyu; LI, Shanping. (2015.0). *2015 26th IEEE International Symposium on Software Reliability Engineering (ISSRE): November 2-5, Gaithersbury, MD, Proceedings,* (pp. 370-380) Piscataway, NJ: IEEE. https://doi.org/10.1109/ISSRE.2015.7381830 (Published)

Should fixing these failures be delegated to automated program repair?, by LE, Xuan-Bach D.; LE, Tien-Duy B. Le; LO, David. (2015.0). *2015 IEEE 26th International Symposium on Software Reliability Engineering (ISSRE): Gaithersburg, MD, November 2-5, 2015,* (pp. 427-437) Piscataway, NJ: IEEE. http://doi.org/10.1109/ISSRE.2015.7381836 (Published)

Who Should Review This Change? Putting Text and File Location Analyses Together for More Accurate Recommendations, by XIA, Xin; LO, David; WANG, Xinyu; YANG, Xiaohu. (2015.0). *2015 IEEE 31st International Conference on Software Maintenance and Evolution (ICSME): September 29-October 1, 2015, Bremen, Gemany: Proceedings,* (pp. 261-270) Piscataway, NJ: IEEE. http://dx.doi.org/10.1109/ICSM.2015.7332472 (Published)

What are the characteristics of high-rated apps? A case study on free Android applications, by TIAN, Yuan; NAGAPPAN, Meiyappan; LO, David; HASSAN, Ahmed E.. (2015.0). *2015 IEEE 31st International Conference on Software Maintenance and Evolution (ICSME): September 29-October 1, Bremen, Gemany: Proceedings,* (pp. 301-310) Piscataway, NJ: IEEE. https://doi.org/10.1109/ICSM.2015.7332476 (Published)

What's Hot in Software Engineering Twitter Space?, by SHARMA, Abhishek; TIAN, Yuan; LO, David. (2015.0). *2015 IEEE 31st International Conference on Software Maintenance and Evolution (ICSME): September 29-October 1, 2015, Bremen, Gemany: Proceedings,* (pp. 541-545) Piscataway, NJ: IEEE. http://dx.doi.org/10.1109/ICSM.2015.7332510 (Published)

Constrained feature selection for localizing faults, by LE, Tien-Duy B.; LO, David; LI, Ming. (2015.0). *2015 IEEE 31st International Conference on Software Maintenance and Evolution (ICSME): September 29-October 1, 2015, Bremen, Gemany: Proceedings,* (pp. 501-505) Piscataway, NJ: IEEE. https://doi.org/10.1109/ICSM.2015.7332502 (Published)

Information retrieval and spectrum based bug localization: Better together, by LE, Tien-Duy B.; OENTARYO, Richard J.; LO, David. (2015.0). *ESEC/FSE 2015: Proceedings of the 2015 10th Joint Meeting on Foundations of Software Engineering, Bergamo, Italy, August 30 - September 4,* (pp. 579-590) New York: ACM. https://doi.org/10.1145/2786805.2786880 (Published)

How practitioners perceive the relevance of software engineering research, by LO, David; NAGAPPAN, Nachiappan; ZIMMERMANN, Thomas. (2015.0). *ESEC/FSE 2015: Proceedings of the 10th Joint Meeting on Foundations of Software Engineering: Bergamo, Italy, August 30 - September 4, 2015,* (pp. 415-425) New York: ACM. http://doi.org/10.1145/2786805.2786809 (Published)

Deep learning for just-in-time defect prediction, by YANG, Xinli; LO, David; XIA, Xin; ZHANG, Yun; SUN, Jianling. (2015.0). *2015 IEEE International Conference on Software Quality, Reliability and Security, QRS 2015: 3-5 August, Vancouver, Canada: Proceedings,* (pp. 17-26) Piscataway, NJ: IEEE. https://doi.org/10.1109/QRS.2015.14 (Published)

Active semi-supervised approach for checking app behavior against its description, by MA, Siqi; WANG, Shaowei; LO, David; DENG, Robert H.; SUN, Cong. (2015.0). *2015 IEEE 39th Annual Computers Software and Applications Conference (COMPSAC): 1-5 July 2015, Taichung, Taiwan: Proceedings,* (pp. 179-184) Piscataway, NJ: IEEE. https://doi.org/10.1109/COMPSAC.2015.93 (Published)

An Empirical Study of Bug Fixing Rate, by ZOU, Weiqin; XIA, Xin; ZHANG, Weiqiang; CHEN, Zhenyu; LO, David. (2015.0). *39th Annual International Computers, Software and Applications Conference (COMPSAC 2015),* (pp. 254-263) Taichung, Taiwan: http://dx.doi.org/10.1109/COMPSAC.2015.57 (Published)

An empirical study of classifier combination on cross-project defect prediction, by ZHANG, Yun; LO, David; XIA, Xin; SUN, Jianling. (2015.0). *2015 IEEE 39th Annual Computer Software and Applications Conference: Taichung, Taiwan, July 1-5,* (pp. 264-269) Piscataway, NJ: IEEE. https://doi.org/10.1109/COMPSAC.2015.58

(Published)

RCLinker: Automated linking of issue reports and commits leveraging rich contextual information, by LE, Tien-Duy B.; VASQUEZ, Mario Linares; LO, David; POSHYVANYK, Denys. (2015.0). *2015 IEEE 23rd International Conference on Program Comprehension (ICPC 2015): Florence, Italy, May 18-19,* (pp. 36-47) Los Alamitos, CA: IEEE Computer Society. https://doi.org/10.1109/ICPC.2015.13 (Published)

Active semi-supervised defect categorization, by THUNG, Ferdian; LE Xuan-Bach D.; LO, David. (2015.0). *2015 23rd IEEE International Conference on Program Comprehension (ICPC): May 18-19, Florence, Italy, Proceedings,* (pp. 60-70) Piscataway, NJ: IEEE. https://doi.org/10.1109/ICPC.2015.15 (Published)

Understanding Customer Satisfaction Feedback in an IT Outsourcing Company: A Case Study on the Insigma Hengtian Company, by XIA, Xin; LO, David; TANG, Jingfan; LI, Shanping. (2015.0). *19th International Conference on Evaluation and Assessment in Software Engineering (EASE 2015),* Nanjing, China: http://dx.doi.org/10.1145/2745802.2745834 (Published)

An empirical assessment of Bellon's Clone Benchmark, by CHARPENTIER, Alan; FALLERI, Jean-Rémy; LO, David; REVEILLERE, Laurent. (2015.0). *EASE '15: Proceedings of the 19th International Conference on Evaluation and Assessment in Software Engineering, April 29,* (pp. 1-10) New York: ACM. https://doi.org/10.1145/2745802.2745821 (Published)

Understanding the Test Automation Culture of App Developers, by KOCHHAR, Pavneet Singh; THUNG, Ferdian.; NAGAPPAN, Nachiappan; ZIMMERMANN, Thomas; LO, David. (2015.0). *ICST 2015 IEEE International Conference on Software Testing, Verification and Validation: 13-17 April 2015, Graz: Proceedings,* (pp. 1-10) Piscataway, NJ: IEEE. http://dx.doi.org/10.1109/ICST.2015.7102609 (Published)

Evaluating defect prediction using a massive set of metrics, by XUAN, Xiao; LO, David; XIA, Xin; YUAN, Tian. (2015.0). *SAC '15: Proceedings of the 30th Annual ACM Symposium on Applied Computing, Salamanca, Spain, April 13-17,* (pp. 1644-1647) New York: ACM. https://doi.org/10.1145/2695664.2695959 (Published)

Beyond support and confidence: Exploring interestingness measures for rule-based specification mining, by LE, Tien Duy Bui; LO, David. (2015.0). *2015 IEEE 22nd International Conference on Software Analysis, Evolution and Reengineering (SANER): March 2-6, Montréal: Proceedings,* (pp. 331-340) Piscataway, NJ: IEEE. https://doi.org/10.1109/SANER.2015.7081843 (Published)

Query Expansion via Wordnet for Effective Code Search, by LU, Meili; SUN, Xiaobing; WANG, Shaowei; LO, David; DUAN, Yucong. (2015.0). *22nd IEEE International Conference on Software Analysis, Evolution, and Reengineering (SANER),* (pp. 545-549) Montreal, Canada: http://dx.doi.org/10.1109/SANER.2015.7081874 (Published)

Code Coverage and Test Suite Effectiveness: Empirical Study with Real Bugs in Large Systems, by KOCHHAR, Pavneet Singh; THUNG, Ferdian; LO, David. (2015.0). *22nd IEEE International Conference on Software Analysis, Evolution, and Reengineering (SANER),* (pp. 560-564) Montreal, Canada: IEEE. http://dx.doi.org/10.1109/SANER.2015.7081877 (Published)

NIRMAL: Automatic identification of software relevant Tweets leveraging language model, by SHARMA, Abhishek; TIAN, Yuan; LO, David. (2015.0). *2015 IEEE 22nd International Conference on Software Analysis, Evolution, and Reengineering, SANER: Proceedings: March 2-6, Montréal,* (pp. 449-458) Piscataway, NJ: IEEE. https://doi.org/10.1109/SANER.2015.7081855 (Published)

Modeling the Evolution of Development Topics Using Dynamic Topic Models, by HU, Jianjun; SUN, Xiaobing; LO, David; LI, Bin. (2015.0). *22nd IEEE International Conference on Software Analysis, Evolution, and Reengineering (SANER),* (pp. 3-12) Montreal, Canada: http://dx.doi.org/10.1109/SANER.2015.7081810 (Published)

Cross-Project Build Co-change Prediction, by XIA, Xin; LO, David; MCINTOSH, Shane; SHIHAB, Emad; HASSAN, Ahmed. (2015.0). *22nd IEEE International Conference on Software Analysis, Evolution, and Reengineering (SANER),* (pp. 311-320) Montreal, Canada: http://dx.doi.org/10.1109/SANER.2015.7081841 (Published)

An empirical study on the adequacy of testing in open source projects, by KOCHHAR, Pavneet Singh; THUNG, Ferdian; LO, David; LAWALL, Julia. (2014.0). *21st Asia-Pacific Software Engineering Conference: APSEC 2014: Proceedings,1-4 December, Jeju Island, South Korea,* (pp. 215-222) Los Alamitos, CA: IEEE Computer Society. https://doi.org/10.1109/APSEC.2014.42 (Published)

BugLocalizer: Integrated tool support for bug localization, by THUNG, Ferdian; LE, Tien-Duy B.; KOCHHAR,

Pavneet Singh; LO, David. (2014.0). *22nd ACM SIGSOFT International Symposium on the Foundations of Software Engineering (FSE 2014): Proceedings: November 16-21, 2014, Hong Kong, China,* (pp. 767-770) New York: ACM. https://doi.org/10.1145/2635868.2661678 (Published)

Predicting effectiveness of IR-based bug localization techniques, by LE, Tien-Duy B.; THUNG, Ferdian; LO, David. (2014.0). *2014 IEEE 25th International Symposium on Software Reliability Engineering: ISSRE: Proceedings: 3-6 November, Naples, Italy,* (pp. 335-345) Los Alamitos, CA: IEEE Computer Society. https://doi.org/10.1109/ISSRE.2014.39 (Published)

Dynamic inference of change contracts, by LE, Tien-Duy B.; YI, Jooyong; LO, David; THUNG, Ferdian; Roychoudhury, Abhik. (2014.0). *2014 IEEE International Conference on Software Maintenance and Evolution (ICSME): Proceedings: 28 September - 3 October 2014, Victoria, Canada,* (pp. 451-455) Los Alamitos, CA: IEEE Computer Society. https://doi.org/10.1109/ICSME.2014.72 (Published)

Compositional Vector Space Models for Improved Bug Localization, by WANG, Shaowei; LO, David; LAWALL, Julia. (2014.0). *IEEE International Conference on Software Maintenance and Evolution (ICSME): Proceedings: September 29 - October 3, 2014, Victoria, Canada,* (pp. 171-180) Piscataway, NJ: IEEE. http://dx.doi.org/10.1109/ICSME.2014.39 (Published)

An Exploratory Study on Software Microblogger Behaviors, by TIAN, Yuan; LO, David. (2014.0). *MUD 2014: 2014 4th IEEE Workshop on Mining Unstructured Data: Proceedings: 30 September 2014, Victoria, British Columbia, Canada,* (pp. 1-5) Los Alamitos, CA: IEEE Computer Society. http://dx.doi.org/10.1109/MUD.2014.14 (Published)

Fusing Fault Localizers, by Lucia; LO, David; XIA, Xin. (2014.0). *ASE '14: Proceedings of the 29th ACM/IEEE International Conference on Automated Software Engineering: September 15-19, 2014, Vasteras, Sweden,* (pp. 127-138) New York: ACM. http://dx.doi.org/10.1145/2642937.2642983 (Published)

Active code search: Incorporating user feedback to improve code search relevance, by WANG, Shaowei; LO, David; JIANG, Lingxiao. (2014.0). *ASE '14: Proceedings of the 29th ACM/IEEE International Conference on Automated Software Engineering: Vasteras, Sweden, 15-19 September,* (pp. 677-682) New York: ACM. http://doi.org/10.1145/2642937.2642947 (Published)

Potential biases in bug localization: Do they matter?, by KOCHHAR, Pavneet Singh; TIAN, Yuan; LO, David. (2014.0). *ASE '14: Proceedings of the 29th ACM/IEEE International Conference on Automated Software Engineering: September 15-19, 2014, Vasteras, Sweden,* (pp. 803-814) New York: ACM. https://doi.org/10.1145/2642937.2642997 (Published)

DupFinder: Integrated tool support for duplicate bug report detection, by THUNG, Ferdian; KOCHHAR, Pavneet Singh; LO, David. (2014.0). *ASE '14: Proceedings of the 29th ACM/IEEE International Conference on Automated Software Engineering: September 15-19, Vasteras, Sweden,* (pp. 871-874) New York: ACM. https://doi.org/10.1145/2642937.2648627 (Published)

Automatic Defect Categorization based on Fault Triggering Conditions, by XIA, Xin; LO, David; WANG, Xinyu; ZHOU, Bo. (2014.0). *2014 19th International Conference on Engineering of Complex Computer Systems (ICECCS 2014): August 4-7, 2014, Tianjin,* (pp. 39-48) Los Alamitos, CA: IEEE Computer Society. http://dx.doi.org/10.1109/ICECCS.2014.14 (Published)

Automatic fine-grained issue report reclassification, by KOCHHAR, Pavneet Singh; THUNG, Ferdian; LO, David. (2014.0). *2014 19th International Conference on Engineering of Complex Computer Systems (ICECCS): August 4-7, Tianjin, Proceedings,* (pp. 126-135) Los Alamitos, CA: IEEE Computer Society. https://doi.org/10.1109/ICECCS.2014.25 (Published)

Automated Configuration Bug Report Prediction using Text Mining, by Xia, Xin; LO, David; Qiu, Weiwei; Xingen, Wang; Zhou, Bo. (2014.0). *IEEE 38th Annual International Computer Software and Applications Conference: Proceedings: 27-29 July 2014, Vasteras, Sweden,* (pp. 107-116) Piscataway, NJ: IEEE. http://dx.doi.org/10.1109/COMPSAC.2014.17 (Published)

Build Predictor: More Accurate Missed Dependency Prediction in Build Configuration Files, by Zhou, Bo; Xin, Xia; LO, David; Wang, Xinyu. (2014.0). *IEEE 38th Annual International Computer Software and Applications Conference: Proceedings: 27-29 July 2014, Vasteras, Sweden,* (pp. 53-58) Vasteras: IEEE. http://dx.doi.org/10.1109/COMPSAC.2014.12 (Published)

BOAT: An experimental platform for researchers to comparatively and reproducibly evaluate bug localization techniques, by WANG, Xinyu; LO, David; XIA, Xin; WANG, Xingen; KOCHHAR, Pavneet Singh; YUAN, Tian; YANG, Xiaohu; LI, Shanping; SUN, Jianling; ZHOU, Bo. (2014.0). *ICSE Companion 2014:*

Proceedings of the 36th International Conference on Software Engineering: May 31-June 7, Hyderabad, India, (pp. 572-575) New York: ACM. https://doi.org/10.1145/2591062.2591066 (Published)

SEWordSim: Software-Specific Word Similarity Database, by TIAN, Yuan; LO, David; LAWALL, Julia. (2014.0). *ICSE Companion 2014: 36th International Conference on Software Engineering: Proceedings: May 31-June 7, 2014, Hyderabad, India,* (pp. 568-571) New York: ACM. https://doi.org/10.1145/2591062.2591071 (Published)

Version history, similar report, and structure: Putting them together for improved bug localization, by Wang, Shaowei; LO, David. (2014.0). *22nd International Conference on Program Comprehension (ICPC 2014): Proceedings: June 2-3, 2014, Hyderabad, India,* (pp. 53-63) New York: ACM. http://dx.doi.org/10.1145/2597008.2597148 (Published)

Cross-language Bug Localization, by XIA, Xin; LO, David; WANG, Xingen; ZHANG, Chenyi; WANG, Xinyu. (2014.0). *22nd International Conference on Program Comprehension (ICPC 2014): Proceedings: June 2-3, 2014, Hyderabad, India,* (pp. 275-278) New York: ACM. http://dx.doi.org/10.1145/2597008.2597788 (Published)

Towards more accurate content categorization of API discussions, by Zhou, Bo; Xia, Xin; LO, David; Tian, Cong; Wang, Xinyu. (2014.0). *22nd International Conference on Program Comprehension (ICPC 2014): Proceedings: June 2-3, 2014, Hyderabad, India,* (pp. 95-105) New York: ACM. http://dx.doi.org/10.1145/2597008.2597142 (Published)

Condensing class diagrams by analyzing design and network metrics using optimistic classification, by THUNG, Ferdian; LO, David; Osman, Mohd Hafeez; Chaudron, Michel R.V.. (2014.0). *ICPC 2014: Proceedings of the 22nd International Conference on Program Comprehension: Hyderabad, India, June 2-3, 2014,* (pp. 110-121) New York: ACM. http://doi.org/10.1145/2597008.2597157 (Published)

It's not a bug, it's a feature: Does misclassification affect bug localization?, by KOCHHAR, Pavneet Singh; LE, Tien-Duy B.; LO, David. (2014.0). *MSR 2014: Proceedings of the 11th Working Conference on Mining Software Repositories: May 31-June 1, 2014, Hyderabad,* (pp. 296-299) New York: ACM. https://doi.org/10.1145/2597073.2597105 (Published)

On finding the point where there is no return: Turning point mining on game data, by GONG, Wei; LIM, Ee Peng; ZHU, Feida; ACHANANUPARP, Palakorn; LO, David. (2014.0). *Proceedings of the 2014 SIAM International Conference on Data Mining: April 24-26, Philadelphia, PA,* (pp. 956-964) Philadelphia, PA: SIAM. https://doi.org/10.1137/1.9781611973440.109 (Published)

An Empirical Study of Bugs in Build Process, by ZHAO, Xiaoqiong; XIA, Xin; Kochhar, Pavneet Singh; LO, David; LI, Shanping. (2014.0). *SAC '14 Proceedings of the 29th Annual ACM Symposium on Applied Computing,* (pp. 1187-1189) New York, NY, USA: ACM. http://dx.doi.org/10.1145/2554850.2555142 (Published)

Build System Analysis with Link Prediction, by XIA, Xin; LO, David; WANG, Xinyu; ZHOU, Bo. (2014.0). *SAC '14: Proceedings of the 29th ACM Symposium on Applied Computing: March 24 - 28, 2014, Gyeongju, Korea,* (pp. 1184-1186) New York: ACM. http://dx.doi.org/10.1145/2554850.2555134 (Published)

A comparative study on the effectiveness of part-of-speech tagging techniques on bug reports, by TIAN, Yuan; LO, David. (2015.0). *2015 IEEE 22nd International Conference on Software Analysis, Evolution and Reengineering (SANER): Proceedings: March 2-6, 2015, Montréal,* (pp. 570-574) Piscataway, NJ: IEEE. https://doi.org/10.1109/SANER.2015.7081879 (Published)

Predicting response in mobile advertising with Hierarchical Importance-Aware Factorization Machine, by OENTARYO, Richard Jayadi; LIM, Ee Peng; LOW, Jia Wei; LO, David; FINEGOLD, Michael. (2014.0). *WSDM'14: Proceedings of the 7th ACM International Conference on Web Search and Data Mining, February 24-28, 2014, New York,* (pp. 123-132) New York: ACM. http://doi.org/10.1145/2556195.2556240 (Published)

Towards More Accurate Multi-Label Software Behavior Learning, by XIA, Xin; YANG, Feng; LO, David; CHEN, Zhenyu; WANG, Xinyu. (2014.0). *2014 Software Evolution Week: IEEE Conference on Software Maintenance, Reengineering and Reverse Engineering (CSMR-WCRE): Proceedings: February 3-6, 2014, Antwerp,* (pp. 134-143) Piscataway, NJ: IEEE. http://doi.org/10.1109/CSMR-WCRE.2014.6747163 (Published)

Automated construction of a software-specific word similarity database, by YUAN, Tian; LO, David; Lawall, Julia. (2014.0). *2014 Software Evolution Week: IEEE Conference on Software Maintenance, Reengineering and Reverse Engineering (CSMR-WCRE): Proceedings: February 3-6, 2014, Antwerp,* (pp. 44-53) Piscataway,

NJ: IEEE. https://doi.org/10.1109/CSMR-WCRE.2014.6747213 (Published)

An Empirical Study of Bug Report Field Reassignment, by XIA, Xin; LO, David; WEN, Ming; EMAD, Shihab; ZHOU, Bo. (2014.0). *2014 Software Evolution Week: IEEE Conference on Software Maintenance, Reengineering and Reverse Engineering (CSMR-WCRE): Proceedings: February 3-6, 2014, Antwerp,* (pp. 174-183) Piscataway, NJ: IEEE. http://doi.org/10.1109/CSMR-WCRE.2014.6747167 (Published)

Predicting best answerers for new questions: An approach leveraging topic modeling and collaborative voting, by TIAN, Yuan; KOCHHAR, Pavneet Singh; LIM, Ee Peng; ZHU, Feida; LO, David. (2014.0). *Social Informatics: SocInfo 2013 International Workshops, QMC and HISTOINFORMATICS: Kyoto, Japan, November 25, 2013, Revised selected papers,* (pp. 55-68) Cham: Springer Verlag. http://doi.org/10.1007/978-3-642-55285-4_5 (Published)

Automatic Recommendation of API Methods from Feature Requests, by THUNG, Ferdian; LO, David; LAWALL, Julia. (2013.0). *2013 28th IEEE/ACM International Conference on Automated Software Engineering (ASE) Proceedings: 11-15 November 2013, Silicon Valley, CA,* (pp. 290-300) Piscataway, NJ: IEEE. http://dx.doi.org/10.1109/ASE.2013.6693088 (Published)

Mining Branching-Time Scenarios, by FAHLAND, Dirk; LO, David; MAOZ, Shahar. (2013.0). *2013 28th IEEE/ACM International Conference on Automated Software Engineering (ASE) Proceedings: 11-15 November 2013, Silicon Valley, CA,* (pp. 443-453) Piscataway, NJ: IEEE. http://dx.doi.org/10.1109/ASE.2013.6693102 (Published)

Got issues? Who cares about it? A large scale investigation of issue trackers from GitHub, by BISSYANDE, Tegawende F.; LO, David; JIANG, Lingxiao; REVEILLERE, Laurent; KLEIN, Jacques; LE TRAON, Yves. (2013.0). *ISSRE 2013: Proceedings of the IEEE 24th International Symposium on Software Reliability Engineering: Pasadena, 4-7 November,* (pp. 188-197) Piscataway, NJ: IEEE. http://doi.org/10.1109/ISSRE.2013.6698918 (Published)

Understanding the genetic makeup of Linux device drivers, by TSCHUDIN, Peter Senna; REVEILLERE, Laurent; JIANG, Lingxiao; LO, David; LAWALL, Julia; MULLER, Gilles. (2013.0). *PLOS '13: Proceedings of the 7th Workshop on Programming Languages and Operating Systems, Farmington, PA, November 3-6,* (pp. 1-6) New York: ACM. https://doi.org/10.1145/2525528.2525536 (Published)

Accurate developer recommendation for bug resolution, by XIA, Xin; LO, David; WANG, Xinyu; ZHOU, Bo. (2013.0). *2013 20th Working Conference on Reverse Engineering (WCRE): Koblenz, Germany, October 14-17: Proceedings,* (pp. 72-81) Piscataway, NJ: IEEE. https://doi.org/10.1109/WCRE.2013.6671282 (Published)

Automated Library Recommendation, by THUNG, Ferdian; LO, David; LAWALL, Julia. (2013.0). *2013 20th Working Conference on Reverse Engineering (WCRE 2013): Proceedings: Koblenz, Germany, 14-17 October 2013,* (pp. 182-191) Piscataway, NJ: IEEE. http://doi.org/10.1109/WCRE.2013.6671293 (Published)

Automatic recovery of root causes from bug-fixing changes, by THUNG, Ferdian; LO, David; JIANG, Lingxiao. (2013.0). *WCRE 2013: Proceedings of the 20th Working Conference on Reverse Engineering: Koblenz, Germany, 14-17 October,* (pp. 92-101) Piscataway, NJ: IEEE. http://doi.org/10.1109/WCRE.2013.6671284 (Published)

Will fault localization work for these failures? An automated approach to predict effectiveness of fault localization tools, by LE, Tien-Duy B.; LO, David. (2013.0). *2013 29th IEEE International Conference on Software Maintenance: Eindhoven, September 22-28: Proceedings,* (pp. 310-319) Los Alamitos, CA: IEEE Computer Society. https://doi.org/10.1109/ICSM.2013.42 (Published)

Theory and practice, do they match? A case with spectrum-based fault localization, by LE, Tien-Duy B.; THUNG, Ferdian; LO, David. (2013.0). *2013 29th IEEE International Conference on Software Maintenance: Eindhoven, September 22-28: Proceedings,* (pp. 380-383) Los Alamitos, CA: IEEE Computer Society. https://doi.org/10.1109/ICSM.2013.52 (Published)

Multi-Abstraction Concern Localization, by Duy, Tien-Duy B.; WANG, Shaowei; LO, David. (2013.0). *Proceedings: 2013 IEEE International Conference on Software Maintenance,* (pp. 364-367) Eindhoven: IEEE. http://dx.doi.org/10.1109/ICSM.2013.48 (Published)

DRONE: Predicting Priority of Reported Bugs by Multi-factor Analysis, by TIAN, Yuan; LO, David; SUN, Chengnian. (2013.0). *Proceedings: 2013 IEEE International Conference on Software Maintenance,* (pp. 200-209) USA: IEEE. http://dx.doi.org/10.1109/ICSM.2013.31 (Published)

Hierarchical Parallel Algorithm for Modularity-Based Community Detection Using GPUs, by CHEONG, Chun Yew; HUYNH, Huynh Phung; LO, David; GOH, Rick Siow Mong. (2013.0). *Euro-Par 2013: Parallel Processing Workshops : BigDataCloud, DIHC, FedICI, HeteroPar, HiBB, LSDVE, MHPC, OMHI, PADABS, PROPER, Resilience, ROME, UCHPC 2013, Aachen, Germany, August 26-30, 2013. Revised Selected Papers.,* (pp. 775-787) Berlin: Springer Verlag. http://dx.doi.org/10.1007/978-3-642-40047-6_77 (Published)

An Empirical Study of Bugs in Software Build System, by XIA, Xin; ZHOU, Xiaozhen; LO, David; ZHAO, Xiaoqiong. (2014.0). *2013 13th International Conference on Quality Software (QSIC 2013): Proceedings: 29-30 July 2013, Nanjing, China,* (pp. 200-203) Piscataway, NJ: IEEE. https://doi.org/10.1109/QSIC.2013.60 (Published)

An empirical study of adoption of software testing in open source projects, by KOCHHAR, Pavneet Singh; BISSYANDE, Tegawende F.; LO, David; JIANG, Lingxiao. (2013.0). *QSIC 2013: Proceedings of the 13th International Conference on Quality Software: Nanjing, China, 29-30 July,* (pp. 103-112) Piscataway, NJ: IEEE. http://doi.org/10.1109/QSIC.2013.57 (Published)

Popularity, interoperability, and impact of programming languages in 100,000 open source projects, by BISSYANDE, Tegawende F.; THUNG, Ferdian; LO, David; JIANG, Lingxiao; REVEILLERE, Laurent. (2013.0). *COMPSAC '13: Proceedings of the IEEE 37th Annual Computer Software and Applications Conference: Kyoto, Japan, 22-26 July,* (pp. 303-312) Los Alamitos, CA: IEEE Computer Society. http://doi.ieeecomputersociety.org/10.1109/COMPSAC.2013.55 (Published)

Orion: A software project search engine with integrated diverse software artifacts, by BISSYANDE, Tegawende F.; THUNG, Ferdian; LO, David; JIANG, Lingxiao; REVEILLERE, Laurent. (2013.0). *ICECCS 2013: Proceedings of the 18th International Conference on Engineering of Complex Computer Systems: Singapore, 17-19 July,* (pp. 242-245) Piscataway, NJ: IEEE. http://doi.org/10.1109/ICECCS.2013.42 (Published)

Software Internationalization and Localization: An Industrial Experience, by XIA, Xin; LO, David; ZHU, Feng; WANG, Xinyu; Zhou, Bo. (2013.0). *Proceedings 2013 International Conference on Engineering of Complex Computer Systems ICECCS 2013,* (pp. 222-231) Singapore: IEEE. http://dx.doi.org/10.1109/ICECCS.2013.40 (Published)

Reviving dormant ties in an online social network experiment, by LIM, Ee Peng; CORREA, Denzil; LO, David; FINEGOLD, Michael; ZHU, Feida. (2013.0). *Proceedings of the Seventh International AAAI Conference on Weblogs and Social Media, ICWSW-13, Cambridge, MA, July 8-11, 2013,* (pp. 361-369) Palo Alto, CA: AAAI Press. (Published)

Tag Recommendation in Software Information Sites, by XIA, Xin; LO, David; WANG, Xinyu; Zhou, Bo. (2013.0). *Proceedings of the 10th Working Conference on Mining Software Repositories,* (pp. 287-296) NJ, USA: IEEE. http://dx.doi.org/10.1109/MSR.2013.6624040 (Published)

R-energy for evaluating robustness of dynamic networks, by GAO, Ming; LIM, Ee Peng; LO, David. (2013.0). *WebSci '13: Proceedings of the 5th Annual ACM Web Science Conference, May 2-4, Paris,* (pp. 89-98) New York: ACM. http://doi.org/10.1145/2464464.2464486 (Published)

F-Trail: Finding Patterns in Taxi Trajectories, by MATSUBARA, Yasuko; PAPALEXAKIS, Evangelos; LI, Lei; LO, David; SAKURAI, Yasushi; FALOUTSOS, Christos. (2013.0). *Advances in Knowledge Discovery and Data Mining: 17th Pacific-Asia Conference, PAKDD 2013, Gold Coast, Australia, April 14-17, 2013, Proceedings, Part I,* (pp. 86-98) Berlin: Springer Verlag. http://dx.doi.org/10.1007/978-3-642-37453-1_8 (Published)

An empirical study on developer interactions in StackOverflow, by WANG, Shaowei; LO, David; JIANG, Lingxiao. (2013.0). *SAC 2013: Proceedings of the 28th annual ACM Symposium on Applied Computing: Coimbra, Portugal, 18-22 March,* (pp. 1019-1024) New York: ACM. http://doi.org/10.1145/2480362.2480557 (Published)

Network structure of social coding in GitHub, by THUNG, Ferdian; BISSYANDE, Tegawende F.; LO, David; JIANG, Lingxiao. (2013.0). *CSMR 2013: Proceedings of the 17th European Conference on Software Maintenance and Reengineering: Genova, Italy, 5-8 March,* (pp. 323-326) Piscataway, NJ: IEEE. http://doi.org/10.1109/CSMR.2013.41 (Published)

Adoption of software testing in open source projects: A preliminary study on 50,000 projects, by KOCHHAR, Pavneet Singh; BISSYANDE, Tegawende F.; LO, David; JIANG, Lingxiao. (2013.0). *CSMR 2013: Proceedings of the 2013 17th European Conference on Software Maintenance and Reengineering: Genova, Italy, 5-8 March,* (pp. 353-356) Los Alamitos, CA: IEEE Computer Society. http://doi.ieeecomputersociety.org/10.1109/CSMR.2013.48 (Published)

Empirical evaluation of bug linking, by BISSYANDE, Tegawende F.; THUNG, Ferdian; WANG, Shaowei; LO, David; JIANG, Lingxiao; REVEILLERE, Laurent. (2013.0). *CSMR 2013: Proceedings of the 17th European Conference on Software Maintenance and Reengineering: Genova, Italy, 5-8 March,* (pp. 89-98) Los Alamitos, CA: IEEE Computer Society. http://doi.ieeecomputersociety.org/10.1109/CSMR.2013.19 (Published)

Understanding widespread changes: A taxonomic study, by WANG, Shaowei; LO, David; JIANG, Lingxiao. (2013.0). *CSMR 2013: Proceedings of the 17th European Conference on Software Maintenance and Reengineering: Genova, Italy, 5-8 March,* (pp. 5-14) Piscataway, NJ: IEEE. http://doi.org/10.1109/CSMR.2013.11 (Published)

Predicting project outcome leveraging socio-technical network patterns, by SURIAN, Didi; TIAN, Yuan; LO, David; CHENG, Hong; LIM, Ee Peng. (2013.0). *CSMR 2013: Proceedings of the 2013 17th European Conference on Software Maintenance and Reengineering: 5-8 March 2013, Genova, Italy,* (pp. 47-56) Los Alamitos, CA: IEEE Computer Society. http://doi.ieeecomputersociety.org/10.1109/CSMR.2013.15 (Published)

A Comparative Study of Supervised Learning Algorithms for Re-opened Bug Prediction, by XIA, Xin; LO, David; WANG, Xinyu; YANG, Xiaohu; LI, Shanping; SUN, Jianling. (2013.0). *Proceedings of the 17th European Conference on Software Maintenance and Reengineering CSMR 2013,* (pp. 331-334) Genova, Italy: IEEE. http://doi.ieeecomputersociety.org/10.1109/CSMR.2013.43 (Published)

Diffusion of software features: An exploratory study, by THUNG, Ferdian; LO, David; JIANG, Lingxiao. (2012.0). *APSEC 2012: Proceedings of the 19th Asia-Pacific Software Engineering Conference, Hong Kong, 4-7 December,* (pp. 368-373) Piscataway, NJ: IEEE. http://doi.org/10.1109/APSEC.2012.139 (Published)

An empirical study of bugs in machine learning systems, by THUNG, Ferdian; WANG, Shaowei; LO, David; JIANG, Lingxiao. (2012.0). *ISSRE 2012: Proceedings of the 23rd IEEE International Symposium on Software Reliability Engineering, Dallas, 27-30 November,* (pp. 271-280) Los Alamitos, CA: IEEE Computer Society. http://doi.ieeecomputersociety.org/10.1109/ISSRE.2012.22 (Published)

Searching Connected API Subgraph via Text Phrases, by CHAN, Wing-Kwan; CHENG, Hong; LO, David. (2012.0). *FSE '12: Proceedings of the ACM SIGSOFT 20th International Symposium on the Foundations of Software Engineering (FSE-20), Cary, North Carolina, 11-16 November 2012,* New York: ACM. http://dx.doi.org/10.1145/2393596.2393606 (Published)

Automatic defect categorization, by THUNG, Ferdian; LO, David; JIANG, Lingxiao. (2012.0). *WCRE 2012: Proceedings of the 19th Working Conference on Reverse Engineering, Kingston, Ontario, 15-18 October,* (pp. 205-214) Los Alamitos, CA: IEEE Computer Society. http://doi.ieeecomputersociety.org/10.1109/WCRE.2012.30 (Published)

Information retrieval based nearest neighbor classification for fine-grained bug severity prediction, by TIAN, Yuan; LO, David; SUN, Chengnian. (2012.0). *WCRE 2012: Proceedings of the 19th Working Conference on Reverse Engineering, 15-18 October 2012, Kingston, Ontario,* (pp. 215-224) Los Alamitos, CA: IEEE Computer Society. https://doi.org/10.1109/WCRE.2012.31 (Published)

Detecting similar applications with collaborative tagging, by THUNG, Ferdian; LO, David; JIANG, Lingxiao. (2012.0). *ICSM 2012: Proceedings of the 28th IEEE International Conference on Software Maintenance: Riva Del Garda, Trento, Italy, 23-28 September,* (pp. 600-603) Los Alamitos, CA: IEEE Computer Society. https://doi.org/10.1109/ICSM.2012.6405331 (Published)

Inferring semantically related software terms and their taxonomy by leveraging collaborative tagging, by WANG, Shaowei; LO, David; JIANG, Lingxiao. (2012.0). *ICSM 2012: Proceedings of the 28th IEEE International Conference on Software Maintenance: Riva Del Garda, Trento, Italy, 23-28 September,* (pp. 604-607) Piscataway, NJ: IEEE. http://doi.org/10.1109/ICSM.2012.6405332 (Published)

Automatic classification of software related microblogs, by PRASETYO, Philips Kokoh; LO, David; PALAKORN, Achananuparp; TIAN, Yuan; LIM, Ee Peng. (2012.0). *ICSM 2012: proceedings of the 28th IEEE International Conference on Software Maintenance: Riva Del Garda, Trento, Italy, 23-28 September 2012,* (pp. 569-599) Piscataway, NJ: IEEE. http://doi.org/10.1109/ICSM.2012.6405330 (Published)

Interactive fault localization leveraging simple user feedback, by GONG, Liang; LO, David; JIANG, Lingxiao; ZHANG, Hongyu. (2012.0). *ICSM 2012: Proceedings of the 28th IEEE International Conference on Software Maintenance: Riva Del Garda, Trento, Italy, 23-28 September,* (pp. 67-76) Piscataway, NJ: IEEE. http://doi.org/10.1109/ICSM.2012.6405255 (Published)

When would this bug get reported?, by THUNG, Ferdian; LO, David; JIANG, Lingxiao; Lucia; RAHMAN, Foyzur; DEVANBU, Premkumar. (2012.0). *ICSM 2012: Proceedings of the 28th IEEE International Conference on Software Maintenance: Riva Del Garda, Trento, Italy, 23-28 September,* (pp. 420-429) Piscataway, NJ: IEEE. http://doi.org/10.1109/ICSM.2012.6405302 (Published)

In-game action list segmentation and labeling in real-time strategy games, by GONG, Wei; LIM, Ee Peng; ACHANANUPARP, Palakorn; ZHU, Feida; LO, David; CHUA, Freddy Chong-Tat. (2012.0). *2012 IEEE Conference on Computational Intelligence and Games CIG : 11-14 September 2012, Granada, Spain: Proceedings,* (pp. 147-154) Piscataway, NJ: IEEE. http://doi.org/10.1109/CIG.2012.6374150 (Published)

Duplicate Bug Report Detection with a Combination of Information Retrieval and Topic Modeling, by Nguyen, Anh Tuan; Nguyen, Tung; Nguyen, Tien; LO, David; SUN, Chengnian. (2012.0). *ASE 2012 : the 27th IEEE/ACM International Conference on Automated Software Engineering : September 3-7, 2012, Essen, Germany.,* (pp. 70-79) Piscataway, N.J.: ACM. http://dx.doi.org/10.1145/2351676.2351687 (Published)

Diversity maximization speedup for fault localization, by GONG, Liang; LO, David; JIANG, Lingxiao; ZHANG, Hongyu. (2012.0). *ASE 2012: Proceedings of the 27th IEEE/ACM International Conference on Automated Software Engineering: Essen, Germany, September 3-7,* (pp. 30-39) New York: ACM. http://doi.org/10.1145/2351676.2351682 (Published)

Observatory of trends in software related microblogs, by PALAKORN, Achananuparp; IBRAHIM, Nelman Lubis; TIAN, Yuan; LO, David; LIM, Ee Peng. (2012.0). *27th IEEE/ACM International Conference on Automated Software Engineering (ASE): proceedings, September 3-7, 2012, Essen, Germany,* (pp. 334-337) New York: ACM. http://doi.org/10.1145/2351676.2351740 (Published)

Semantic Patch Inference, by Andersen, Jesper; Nguyen, Anh Cuong; LO, David; Lawall, Julia; KHOO, Siau-Cheng. (2012.0). *ASE 2012 : the 27th IEEE/ACM International Conference on Automated Software Engineering : September 3-7, 2012, Essen, Germany.,* (pp. 382-385) Piscataway, N.J.: ACM. http://dx.doi.org/10.1145/2351676.2351753 (Published)

To what extent could we detect field defects? An empirical study of false negatives in static bug finding tools, by THUNG, Ferdian; Lucia; LO, David; JIANG, Lingxiao; DEVANBU, Premkumar; RAHMAN, Foyzur. (2012.0). *ASE 2012: Proceedings of the 27th IEEE/ACM International Conference on Automated Software Engineering: Essen, Germany, September 3-7,* (pp. 50-59) New York: ACM. http://doi.org/10.1145/2351676.2351685 (Published)

kbe-anonymity: Test data anonymization for evolving programs, by Lucia; LO, David; JIANG, Lingxiao; BUDI, Aditya. (2012.0). *ASE 2012: Proceedings of the 27th IEEE/ACM International Conference on Automated Software Engineering, Essen, Germany, September 3-7,* (pp. 262-265) New York: ACM. http://doi.org/10.1145/2351676.2351718 (Published)

Collective churn prediction in social network, by OENTARYO, Richard Jayadi; LIM, Ee Peng; LO, David; ZHU, Feida; PRASETYO, Philips Kokoh. (2012.0). *Proceedings of the 2012 IEEE/ACM International Conference on Advances in Social Networks Analysis and Mining: 26-29 August 2012, Istanbul, Turkey,* (pp. 210-214) Piscataway, NJ: IEEE. http://doi.org/10.1109/ASONAM.2012.44 (Published)

Where should the bugs be fixed? More accurate information retrieval-based bug localization based on bug reports, by ZHOU, Jian; ZHANG, Hongyu; LO, David. (2012.0). *ICSE 2012: 34th International Conference on Software Engineering, June 2-9, Zurich, Switzerland, Proceedings,* (pp. 14-24) Piscataway, NJ: IEEE. https://doi.org/10.1109/ICSE.2012.6227210 (Published)

Active refinement of clone anomaly reports, by Lucia; LO, David; JIANG, Lingxiao, BUDI, Aditya. (2012.0). *ICSE '12: Proceedings of the 34th International Conference on Software Engineering: Zurich, Switzerland, June 2-9,* (pp. 397-407) Piscataway, NJ: IEEE. http://doi.org/10.1109/ICSE.2012.6227175 (Published)

Identifying Linux bug fixing patches, by TIAN, Yuan; LAWALL, Julia; LO, David. (2012.0). *2012 34th ACM/IEEE International Conference on Software Engineering ICSE: Zurich, June 2-9,* (pp. 386-396) Piscataway, NJ: IEEE. https://doi.org/10.1109/ICSE.2012.6227176 (Published)

What does software engineering community microblog about?, by TIAN, Yuan; ACHANANUPARP, Palakorn; LUBIS, Ibrahim Nelman; LO, David; LIM, Ee Peng. (2012.0). *IEEE Working Conference on Mining Software Repositories 9th MSR 2012: 2-3 June 2012, Zurich, Switzerland: Proceedings,* (pp. 247-250) Piscataway, NJ: IEEE. http://doi.org/10.1109/MSR.2012.6224287 (Published)

Are faults localizable?, by Lucia; THUNG, Ferdian; LO, David; JIANG, Lingxiao. (2012.0). *MSR 2012:*

Proceedings of the 9th IEEE Working Conference on Mining Software Repositories: Zurich, Switzerland, 2-3 June, (pp. 74-77) Piscataway, NJ: IEEE. http://doi.org/10.1109/MSR.2012.6224302 (Published)

Inferring Class Level Specifications for Distributed Systems, by KUMAR, Sandeep; Khoo, Siau-Cheng; Roychoudhury, Abhik; LO, David. (2012.0). *34th International Conference on Software Engineering (ICSE), 2012 2 - 9 June 2012, Zurich, Switzerland ; proceedings,* Piscataway, NJ: IEEE. http://dx.doi.org/10.1109/ICSE.2012.6227128 (Published)

Understanding Task-driven Information Flow in Collaborative Networks, by MIAO, Gengxin; TAO, Shu; CHENG, Winnie; Moulic, Randy; Moser, Louise E.; LO, David; YAN, Xifeng. (2012.0). *WWW'12 : proceedings of the 21st Annual Conference on World Wide Web : Appril 16-20, 2012, Lyon, France,* (pp. 849-858) New York, NY: ACM. http://dx.doi.org/10.1145/2187836.2187951 (Published)

Improved duplicate bug report identification, by TIAN, Yuan; SUN, Chengnian; LO, David. (2012.0). *2012 16th European Conference on Software Maintenance and Reengineering (CSMR): Szeged, Hungary, March 27-30: Proceedings,* (pp. 385-390) Piscataway, NJ: IEEE. https://doi.org/10.1109/CSMR.2012.48 (Published)

HuMan: Creating memorable fingerprints of mobile users, by PAYAS, Gupta; TAN, Kiat Wee; RAMASUBBU, Narayanasamy; LO, David; GAO, Debin; BALAN, Rajesh Krishna. (2012.0). *2012 IEEE International Conference on Pervasive Computing and Communications Workshops: Lugano, Switzerland, 19-23 March: Proceedings,* (pp. 479-482) Piscataway, NJ: IEEE. https://doi.org/10.1109/PerComW.2012.6197540 (Published)

Bug Signature Minimization and Fusion, by LO, David; CHENG, Hong; WANG, Xiaoyin. (2011.0). *IEEE 13th International Symposium on High-Assurance Systems Engineering (HASE), 2011 : 10 - 12 Nov. 2011, Boca Raton, Florida, USA ; proceedings,* (pp. 340-347) Piscataway, NJ: IEEE. http://dx.doi.org/10.1109/HASE.2011.36 (Published)

Towards More Accurate Retrieval of Duplicate Bug Reports, by SUN, Chengnian; LO, David; Khoo, Siau-Cheng; JIANG, Jing. (2011.0). *2011 26th IEEE/ACM International Conference on Automated Software Engineering (ASE 2011) : Lawrence, Kansas, USA, 6 - 10 November 2011,* Piscataway, NJ: IEEE. http://doi.ieeecomputersociety.org/10.1109/ASE.2011.6100061 (Published)

Search-based fault localization, by WANG, Shaowei; LO, David; JIANG, Lingxiao; Lucia; LAU, Hoong Chuin. (2011.0). *ASE 2011: Proceedings of the 26th IEEE/ACM International Conference on Automated Software Engineering, Lawrence, KS, 6-10 November,* (pp. 556-559) Piscataway, NJ: IEEE. http://doi.org/10.1109/ASE.2011.6100124 (Published)

Finding relevant answers in software forums, by GOTTIPATI, Swapna; LO, David; JIANG, Jing. (2011.0). *ASE 2011: Proceedings of the 26th IEEE/ACM International Conference on Automated Software Engineering: Lawrence, KS, November 6-10,* (pp. 323-332) Los Alamitos, CA: IEEE Computer Society. https://doi.ieeecomputersociety.org/10.1109/ASE.2011.6100069 (Published)

Mining direct antagonistic communities in explicit trust networks, by LO, David; SURIAN, Didi; KUAN, Zhang; LIM, Ee Peng. (2011.0). *CIKM '11: Proceedings of the 20th ACM International Conference on Information and Knowledge Management, Glasgow, Scotland, 24-28 October,* (pp. 1013-1018) New York: ACM. https://doi.org/10.1145/2063576.2063722 (Published)

Concern localization using information retrieval: An empirical study on Linux kernel, by WANG, Shaowei; LO, David; XING, Zhenchang; JIANG, Lingxiao. (2011.0). *WCRE 2011: Proceedings of the 18th Working Conference on Reverse Engineering: Limerick, Ireland, 17-20 October,* (pp. 92-96) Los Alamitos, CA: IEEE Computer Society. http://doi.ieeecomputersociety.org/10.1109/WCRE.2011.72 (Published)

Code search via topic-enriched dependence graph matching, by WANG, Shaowei; LO, David; JIANG, Lingxiao. (2011.0). *WCRE 2011: Proceedings of the 18th Working Conference on Reverse Engineering: Limerick, Ireland, 17-20 October,* (pp. 119-123) Los Alamitos, CA: IEEE Computer Society. http://doi.ieeecomputersociety.org/10.1109/WCRE.2011.69 (Published)

Recommending people in developers' collaboration network, by SURIAN, Didi; LIU, Nian; LO, David; TONG, Hanghang; LIM, Ee Peng; FALOUTSOS, Christos. (2011.0). *18th Working Conference on Reverse Engineering (WCRE 2011): Limerick, Ireland, 17-20 October: Proceedings,* (pp. 379-388) Piscataway, NJ: IEEE. https://doi.org/10.1109/WCRE.2011.53 (Published)

Mining top-K large structural patterns in a massive network, by ZHU, Feida; QU, Qiang; LO, David; YAN, Xifeng; HAN, Jiawei; YU, Philip S.. (2011.0). *Proceedings of VLDB Endowment: 37th VLDB 2011, August 29 - September 3, Seattle,* (pp. 807-818) Saratoga, CA: VLDB Endowment. (Published)

NORT: Runtime Anomaly-based Monitoring of Malicious Behavior for Windows, by MILEA, Narcisa Andrea; KHOO, Siau-Cheng; LO, David; POP, Cristi. (2011.0). *Runtime Verification: Second International Conference, RV 2011, San Francisco, CA, USA, September 27-30, 2011, Revised Selected Papers,* (pp. 115-130) Berlin: Springer Verlag. http://dx.doi.org/10.1007/978-3-642-29860-8_10 (Published)

Automated detection of likely design flaws in layered architectures, by BUDI, Aditya; Lucia; LO, David; JIANG, Lingxiao; WANG, Shaowei. (2011.0). *SEKE 2011: Proceedings of the 23rd International Conference on Software Engineering and Knowledge Engineering, Miami Beach, 7-9 July,* (pp. 613-618) Skokie, IL: Knowledge Systems Institute Graduate School. (Published)

kb-anonymity: A model for anonymized behavior-preserving test and debugging data, by BUDI, Aditya; LO, David; JIANG, Lingxiao; Lucia. (2011.0). *PLDI 2011: Proceedings of the 32nd ACM Conference on Programming Language Design and Implementation, San Jose, CA, June 4-8,* (pp. 447-457) New York: ACM. https://doi.org/10.1145/1993316.1993551 (Published)

Mining Message Sequence Graphs, by KUMAR, Sandeep; Khoo, Siau-Cheng; Roychoudhury, Abhik; LO, David. (2011.0). *ICSE 2011: Proceedings of the 2011 International Conference on Software Engineering, May 21-28, Waikkiki, Honolulu, Hawaii,* (pp. 91-100) 345 E 47TH ST, NEW YORK, NY 10017 USA: ACM. http://dx.doi.org/10.1145/1985793.1985807 (Published)

Towards Succinctness in Mining Scenario-Based Specifications, by LO, David; Maoz, Shahar. (2011.0). *16th IEEE International Conference on Engineering of Complex Computer Systems (ICECCS 2011): Proceedings, 27-29 April 2011, Las Vegas, Nevada,* (pp. 231-240) 10662 LOS VAQUEROS CIRCLE, PO BOX 3014, LOS ALAMITOS, CA 90720-1264 USA: IEEE COMPUTER SOC. http://dx.doi.org/10.1109/ICECCS.2011.30 (Published)

Bidirectional Mining of Non-Redundant Recurrent Rules from a Sequence Database, by LO, David; DING, Bolin; Lucia, -; Han, Jiawei. (2011.0). *IEEE 27TH INTERNATIONAL CONFERENCE ON DATA ENGINEERING (ICDE 2011),* (pp. 1043-1054) 345 E 47TH ST, NEW YORK, NY 10017 USA: IEEE. http://doi.ieeecomputersociety.org/10.1109/ICDE.2011.5767848 (Published)

Mining Closed Discriminative Dyadic Sequential Patterns, by LO, David; CHENG, Hong; Lucia, -. (2011.0). *Advances in database technology : EDBT 2011 : 14th International Conference on Extending Database Technology, Uppsala, Sweden, March 22-24, 2011 : proceedings,* (pp. 21-32) New York, NY, USA: ACM. http://dx.doi.org/10.1145/1951365.1951371 (Published)

Instance-based parameter tuning via search trajectory similarity clustering, by Lindawati, Linda; LAU, Hoong Chuin; LO, David. (2011.0). *Learning and Intelligent Optimization: 5th International Conference, LION 5, Rome, Italy, January 17-21, 2011: Selected Papers,* (pp. 131-145) Berlin: Springer Verlag. http://doi.org/10.1007/978-3-642-25566-3_10 (Published)

Mining interesting link formation rules in social networks, by LEUNG, Cane Wing-Ki; LIM, Ee Peng; LO, David; WENG, Jianshu. (2010.0). *CIKM'10: Proceedings of the 19th ACM International Conference on Information and Knowledge Management: October 26-30, 2010, Toronto,* (pp. 209-218) New York: ACM. http://doi.org/10.1145/1871437.1871468 (Published)

Mining collaboration patterns from a large developer network, by SURIAN, Didi; LO, David; LIM, Ee Peng. (2010.0). *WCRE 2010: 17th Working Conference on Reverse Engineering: 13-16 October 2010, Beverly, Massachusetts: Proceedings,* (pp. 269-273) Piscataway, NJ: IEEE. http://doi.org/10.1109/WCRE.2010.38 (Published)

Scenario-based and value-based specification mining: Better together, by LO, David; MAOZ, Shahar. (2010.0). *ASE '10: Proccedings of the 25th IEEE/ACM International Conference on Automated Software Engineering, 20-24 September, Antwerp, Belgium,* (pp. 387-396) New York: ACM. https://doi.org/10.1145/1858996.1859081 (Published)

Matching dependence-related queries in the system dependence graph, by WANG, Xiaoyin; LO, David; CHENG, Jiefeng; ZHANG, LU; Mei, Hong; YU, Jeffrey Xu. (2010.0). *ASE '10: Proccedings of the 25th IEEE/ACM International Conference on Automated Software Engineering, 20-24 September, Antwerp, Belgium,* (pp. 457-466) New York: ACM. https://doi.org/10.1145/1858996.1859091 (Published)

An automated approach for finding variable-constant pairing bugs, by LAWALL, Julia; LO, David. (2010.0). *ASE '10: Proceedings of the 25th IEEE/ACM International Conference on Automated Software Engineering: Antwerp, Belgium, September 20-24,* (pp. 103-112) New York: ACM. https://doi.org/10.1145/1858996.1859014 (Published)

Comprehensive evaluation of association measures for fault localization, by Lucia; LO, David; JIANG, Lingxiao; BUDI, Aditya. (2010.0). *ICSM 2010: Proceedings of the IEEE International Conference on Software Maintenance: Timisoara, Romania, 12-18 September,* (pp. 1-10) Piscataway, NJ: IEEE. http://doi.org/10.1109/ICSM.2010.5609542 (Published)

Mining antagonistic communities from social networks, by ZHANG, Kuan; LO, David; LIM, Ee Peng. (2010.0). *Mining Antagonistic Communities from Social Networks: 14th Pacific-Asia Conference, PAKDD 2010, Hyderabad, India, June 21-24, 2010. Proceedings. Part I,* (pp. 68-80) Heidelberg: Springer Verlag. http://doi.org/10.1007/978-3-642-13657-3_10 (Published)

LM: A Miner for Scenario-Based Specifications, by Doan, Tuan Anh; LO, David; Maoz, Shahar; Khoo, Siau-Cheng. (2010.0). *ACM/IEEE 32nd International Conference on Software Engineering, 2010: ICSE '10, 2-8 May 2010, Cape Town, South Africa (Tool Demo Track),* (pp. 319-320) Piscataway, NJ: ACM. http://doi.ieeecomputersociety.org/10.1145/1810295.1810370 (Published)

A discriminative model approach for accurate duplicate bug report retrieval, by SUN, Chengnian; LO, David; WANG, Xiaoyin; KHOO, Siau-Cheng. (2010.0). *Proceedings of the 32nd Acm/Ieee International Conference on Software Engineering, Cape Town, South Africa, 2010, May 1 - 8,* (pp. 45-54) New York: Association for Computing Machinery. http://worldcat.org/isbn/9781605587196 (Published)

Mining Hierarchical Scenario-Based Specifications, by LO, David; Maoz, Shahar. (2009.0). *2009 IEEE/ACM International Conference on Automated Software Engineering : ASE 2009 : proceedings : 16-20 November 2009, Auckland, New Zealand,* New York, NY, USA: IEEE. http://dx.doi.org/10.1109/ASE.2009.19 (Published)

Mining Scenario-Based Specifications with Value-Based Invariants, by LO, David; Maoz, Shahar. (2009.0). *OOPSLA Orlando 2009 : OOPSLA '09 proceedings and companion ; Onward '09 proceedings, & DSL '09 proceedings : 24th Annual ACM Conference on Object-Oriented Programming, Systems, Languages, and Applications : October 25-29, 2009, Disney's Contemporary Resort,* (pp. 755-756) New York, NY: ACM. http://dx.doi.org/10.1145/1639950.1639999 (Published)

Mining quantified temporal rules: Formalism, algorithms, and evaluation, by LO, David; RAMALINGAM, Ganesan; RANGANATH, Venkatesh Prasad; VASWANI, Kapil. (2009.0). *16th Working Conference on Reverse Engineering, 2009, WCRE '09 : 13-16 October, Lille, France: Proceedings,* (pp. 62-71) Piscataway, NJ: IEEE. https://doi.org/10.1109/WCRE.2009.42 (Published)

Automatic Steering of Behavioral Model Inference, by LO, David; Mariani, Leonardo; Pezze, Mauro. (2009.0). *Joint Meeting of the European Software Engineering Conference and the ACM SIGSOFT Symposium on the Foundations of Software Engineering (ESEC-FSE),* (pp. 345-354) 1515 BROADWAY, NEW YORK, NY 10036-9998 USA: ACM. http://dx.doi.org/10.1145/1595696.1595761 (Published)

Extracting Paraphrases of Technical Terms from Noisy Parallel Software Corpus, by WANG, Xiaoyin; LO, David; JIANG, Jing; ZHANG, LU; MEI, Hong. (2009.0). *Proceedings of the ACL-IJCNLP 2009 Conference Short Papers: 4 August 2009, Singapore,* (pp. 197-200) ACL: Stroudsburg, PA. (Published)

Identifying Bug Signatures Using Discriminative Graph Mining, by CHENG, Hong; LO, David; Zhou, YANG; WANG, Xiaoyin; YAN, Xifeng. (2009.0). *ISSTA 2009 : International Symposium on Software Testing & Analysis : July 19-23, 2009, Chicago, Illinois, USA.,* (pp. 141-152) New York, NY, USA: ACM. http://dx.doi.org/10.1145/1572272.1572290 (Published)

Classification of Software Behaviors for Failure Detection: A Discriminative Pattern Mining Approach, by LO, David; CHENG, Hong; Han, Jiawei; Khoo, Siau-Cheng; SUN, Chengnian. (2009.0). *KDD-2009 : proceedings of the 15th ACM SIGKDD International Conference on Knowledge Discovery and Data Mining : June 28 - July 1, 2009, Paris, France,* New York, NY, USA: ACM. http://dx.doi.org/10.1145/1557019.1557083 (Published)

Efficient mining of closed repetitive gapped subsequences from a sequence database, by DING, Bolin; LO, David; HAN, Jiawei; KHOO, Siau-Cheng. (2009.0). *ICDE '09: IEEE 25th International Conference on Data Engineering; March 29, 2009 - April 2, Shanghai: Proceedings,* (pp. 1024-1035) Piscataway, NJ: IEEE. https://doi.org/10.1109/ICDE.2009.104 (Published)

Specification Mining of Symbolic Scenario-Based Models, by LO, David; Maoz, Shahar. (2008.0). *16th Working Conference on Reverse Engineering, 2009, WCRE '09 : 13 - 16 Oct. 2009, Lille, France ; proceedings,* (pp. 29-35) Piscataway, NJ: ACM. http://dx.doi.org/10.1145/1512475.1512482 (Published)

Hierarchical Inter-Object Traces for Specification Mining, by LO, David; Maoz, Shahar. (2008.0). *Proceedings of the Companion to the 23rd SIGPLAN Conference on Object-Oriented Programming,*

Systems, Languages, and Applications (OOPSLA) (Poster Track), (pp. 761-762) ACM. http://dx.doi.org/10.1145/1449814.1449849 (Published)

Mining Specifications in Diversified Formats from Execution Traces, by LO, David. (2008.0). *2008 IEEE International Conference on Software Maintenance : [ICSM 2008] ; Beijing, China, 28 September - 4 October 2008.,* (pp. 420-423) Piscataway, NJ: IEEE. http://dx.doi.org/10.1109/ICSM.2008.4658094 (Published)

Mining patterns and rules for software specification discovery, by LO, David; KHOO, Siau-Cheng. (2008.0). *Proceedings of the VLDB: 34th International Conference on Very Large Data Bases 2008, August 23-28, Auckland, (PhD workshop),* (pp. 1609-1616) Stanford, CA: VLDB Endowment. http://doi.org/10.14778/1454159.1454234 (Published)

Hierarchical Inter-object Traces for Specification Mining, by LO, David; Maoz, Shahar. (2008.0). *OOPSLA 2008 Nashville : conference proceedings : 23rd Annual ACM Conference on Object-Oriented Programming, Systems, Languages, and Applications : October 19-23, 2008, Nashville, Tennessee, Nashville Convention Center,* (pp. 761-762) New York, NY : ACM. http://dx.doi.org/10.1145/1449814.1449849 (Published)

Mining past-time temporal rules from execution traces, by LO, David; KHOO, Siau-Cheng; LIU, Chao. (2008.0). *WODA '08: Proceedings of the 6th International Workshop on Dynamic Analysis, Seattle, WA, July 21,* (pp. 50-56) New York: ACM. https://doi.org/10.1145/1401827.1401838 (Published)

Mining and Ranking Generators of Sequential Pattern, by LO, David; Khoo, Siau-Cheng; LI, Jinyan. (2008.0). *Proceedings of the 8th SIAM International Conference on Data Mining (SDM),* Atlanta, USA: http://www.siam.org/proceedings/datamining/2008/dm08_51_Lo.pdf (Published)

Efficient Mining of Recurrent Rules from a Sequence Database, by LO, David; Khoo, Siau-Cheng; LIU, Chao. (2008.0). *Database systems for advanced applications : 13th international conference, DASFAA 2008, New Delhi, India, March 19-21, 2008 : proceedings,* HEIDELBERGER PLATZ 3, D-14197 BERLIN, GERMANY: SPRINGER-VERLAG BERLIN. http://portal.acm.org/citation.cfm?id=1802525 (Published)

Mining modal scenarios-based specifications from execution trace of reactive systems, by LO, David; MAOZ, Shahar; KHOO, Siau-Cheng. (2007.0). *ASE '07: Proceedings of the 22nd IEEE/ACM International Conference on Automated Software Engineering, Atlanta, GA, November 5-9,* (pp. 465-468) New York: ACM. https://doi.org/10.1145/1321631.1321710 (Published)

Mining modal scenarios from execution traces, by LO, David; MAOZ, Shahar; KHOO, Siau-Cheng. (2007.0). *OOPSLA '07: Companion to the 22nd ACM SIGPLAN Conference on Object-Oriented Programming, Systems, Languages, and Applications, Montreal, Canada, October 21-25,* (pp. 777-778) New York: ACM. https://doi.org/10.1145/1297846.1297883 (Published)

Mining Temporal Rules from Program Execution Traces, by LO, David; Khoo, Siau-Cheng; LIU, Chao. (2007.0). *Proceedings of the 3rd International Workshop on Program Comprehension through Dynamic Analysis (PCODA),* Vancouver, Canada: ACM. http://portal.acm.org/citation.cfm?id=1401838 (Published)

Efficient Mining of Iterative Patterns for Software Specification Discovery, by LO, David; Khoo, Siau-Cheng; LIU, Chao. (2007.0). *Proceedings of the 13th ACM SIGKDD International Conference on Knowledge Discovery and Data Mining : August 12-15, 2007, San Jose, California,* (pp. 460-469) New York, NY, USA: ACM. http://portal.acm.org/citation.cfm?id=1281243 (Published)

SMArTIC: Towards building an accurate, robust and scalable specification miner, by LO, David; KHOO, Siau-Cheng. (2006.0). *SIGSOFT 2006 FSE-14: Proceedings of the 14th ACM SIGSOFT International Symposium on the Foundations of Software Engineering, Portland, OR, November 5-11,* (pp. 265-275) New York: ACM. https://doi.org/10.1145/1181775.1181808 (Published)

QUARK : Empirical Assessment of Automaton-based Specification Miners, by LO, David; Khoo, Siau-Cheng. (2006.0). *13th Working Conference on Reverse Engineering 2006 : proceedings : Benevento, Italy : October 23-27, 2006,* 10662 LOS VAQUEROS CIRCLE, PO BOX 3014, LOS ALAMITOS, CA 90720-1264 USA: IEEE. http://doi.ieeecomputersociety.org/10.1109/WCRE.2006.47 (Published)

Conference Papers

TreeCaps: Tree-Structured Capsule Networks for program source code processing, by JAYASUNDARA, Vinoj; BUI, Nghi Duy Quoc; JIANG, Lingxiao; LO, David. (2019.0). *Workshop on Machine Learning for*

Systems at the Conference on Neural Information Processing Systems 33rd NeurIPS 2019, December 8-14, Vancouver. (Published)

Edited Conference Proceedings

Proceedings of the 25th International Conference on Program Comprehension, ICPC 2017, edited by SCANNIELLO, Giuseppe; LO, David; SEREBRENIK, Alexander. (22/05/2017). Buenos Aires, Argentina: IEEE Press Piscataway. https://dl.acm.org/citation.cfm?id=3101414πcked=prox (Published)

ASE '16: Proceedings of the 31st ACM/IEEE International Conference on Automated Software Engineering: Singapore, September 3 -7, 2016, edited by LO, David; APEL, Sven Apel; KHURSHID, Sarfraz. (07/09/2016). New York: ACM. http://doi.org/10.1145/2970276.2985778 (Published)

2015 IEEE 15th International Working Conference on Source Code Analysis and Manipulation (SCAM): Proceedings: Bremen, Germany, September 27-28, 2015, edited by GODFREY, Michael W.; LO, David; KHOMH, Foutse. (28/09/2015). Piscataway, NJ: IEEE. http://worldcat.org/isbn/9781467375290 (Published)

14th IEEE International Conference on Data Mining Workshops: Proceedings: Shenzhen, China, 14 December 2014, edited by LI, Ming; ZHANG, Hongyu; LO, David. (14/12/2014). Piscataway, NJ: IEEE. http://worldcat.org/isbn/9781479942732 (Published)

Magazine Articles

Improving software quality and productivity leveraging mining techniques: [Summary of the Second Workshop on Software Mining, at ASE 2013], by LI, Ming; ZHANG, Hongyu; LO, David; Lucia. (2015, January). *Software Engineering Notes, 40* (1), 1-2. https://doi.org/10.1145/2693208.2693219 (Published)

Other Outputs and Contributions

Reports

Mining Modal Scenarios from Program Execution Traces by LO, David; Khoo, Siau-Cheng. (2007). http://dl.comp.nus.edu.sg/dspace/bitstream/1900.100/2571/1/trc8-07.pdf (Published)

Towards better quality specification miners by LO, David; KHOO, Siau-Cheng. (2006). (Published)

Audio / Video Materials

Automating software enginnering [Podcast@SMU] [Audio/Video], by LO, David. (2016, July 01). http://www.smu.edu.sg/podcast/automating-software-engineering (Published)

Data Sets

Starcraft II in-game action lists [Data set], by GONG, Wei; LIM, Ee Peng; ACHANANUPARP, Palakorn; ZHU, Feida; LO, David; CHUA, Freddy. (2012, June 29). (Published)

Posters

Model checking in the absence of code, model and properties, by LO, David; KHOO, Siau-Cheng. (01 Dec 2007). *Asian Symposium on Programming Languages and Systems 5th APLAS 2007 (Poster Track), November 29 - December 1,* (Presented)

Research Grants

Singapore Management University

TrustedSEERs: Trusted Intelligent Work Bots for Engineering Better Software Faster, NRF Investigatorship, National Research Foundation (NRF) , PI (Project Level): David LO, 2023, S$3,214,978

Titan Code Analysis: Vulnerability Discovery with Large Code Models, Translational R&D 2.0 Grant (TRANS2.0), Smart Nation Group , PI (Project Level): David LO , Co-PI (Project Level): SHAR Lwin Khin, OUH Eng Lieh, 2023, S$3,877,744

Development of Secured Components & Systems in Emerging Technologies through Hardware & Software Evaluation, National Cybersecurity R&D (NCR) Programme, Cyber Security Agency of Singapore (CSA) , PI (Project Level): DING Xuhua, Debin GAO, Robert H DENG, David LO , Co-PI (Project Level): Guansong PANG, JIANG Lingxiao, DUAN Yue, YANG Guomin, PANG Hwee Hwa, 2023, S$11,365,070

Less is More: Addressing Mobile Application Security and Privacy through Debloating, NCR-TAU Grant Call, Cyber Security Agency of Singapore (CSA) , PI (Project Level): David LO , Co-PI (Project Level): Debin GAO, 2022, S$599,568

Toward Robust and Adaptable Deep Learning Models of Code, NSERC Canada 2022, S$26,909.36

The Science of Certified AI Systems, Academic Research Fund (AcRF) Tier 3, Ministry of Education (MOE) , PI (Project Level): SUN Jun , Co-PI (Project Level): David LO, JIANG Lingxiao, 2021, S$9,340,776

Trust to Train and Train to Trust: Agent Training Programs for Safety-Critical Environments, AI Singapore Research Programme, AI Singapore , PI (Project Level): Pradeep Reddy VARAKANTHAM , Co-PI (Project Level): Akshat KUMAR, Arunesh SINHA, David LO, 2021, S$6,086,963.76

Reducing COVID-19 Vaccine Hesitancy by Integrating Public Sentiments in Vaccine Communication: A Machine Learning Framework, Regional Collaborations Programme COVID-19 Digital Grants, Australia Academy of Science 2021

Making Big Code Active: From Billions of Code Tokens to Automation, International Research Collaboration Grant, Singapore Data Science Consortium , PI (Project Level): David LO , Co-PI (Project Level): JIANG Lingxiao, 2020, S$631,344

Uncovering Vulnerabilities in Machine Learning Frameworks via Software Composition Analysis and Directed Grammar-Based Fuzzing, NSoE TSS Grant Call, National Satellite of Excellence - Trustworthy Software Systems , PI (Project Level): David LO , Co-PI (Project Level): JIANG Lingxiao, 2020, S$550,000

Research Programme on Computational Law, Smart Systems Strategic Research Programme, Industry Alignment Fund – Pre-Positioning (IAF-PP) Funding Initiative, Info-communications Media Development Authority of Singapore (IMDA) , PI (Project Level): WONG Meng Weng , Co-PI (Project Level): GOH Yihan, SC, LAU Kwan Ho, LIM How Khang, Jerrold SOH, 2019, S$15,189,082

DeepSense: Deep Media Sensing for Software API Recommendation, Academic Research Fund (AcRF) Tier 2, Ministry of Education (MOE) , PI (Project Level): David LO , Co-PI (Project Level): JIANG Lingxiao, 2019, S$723,960

Enhanced function signature recovery for control-flow integrity enforcement on compiler optimized executables, NSoE TSS Grant Call, National Satellite of Excellence - Trustworthy Software Systems , PI (Project Level): Debin GAO , Co-PI (Project Level): David LO, 2019, S$714,780

AutoPrivacyModel: Automated Feature Modelling for Identifying Illegitimate Uses of Privacy-Sensitive Data in Mobile Applications, NSoE MSS-CS Research Programme, National Satellite of Excellence - Mobile Systems Security and Cloud Security , PI (Project Level): JIANG Lingxiao , Co-PI (Project Level): David LO, SHAR Lwin Khin, DING Xuhua, Debin GAO, 2019, S$700,403

Detecting Technical Debt with Natural Language Processing, Academy of Finland 2019, S$621,160

Intelligent and non-instrusive monitoring of Android devices for protection against data-infringing malware, AI Singapore 100 Experiments, AI Singapore , PI (Project Level): Debin GAO , Co-PI (Project Level): David LO, Robert H DENG, 2018, S$479,616

Automatic Inference of Software Transformation Rules for Automatically Back and Forward Porting Legacy Infrastructure Software (Itrans), NRF-ANR Joint Grant Call, National Research Foundation (NRF) , PI (Project Level): David LO , Co-PI (Project Level): JIANG Lingxiao, 2016, S$428,137.2

Safety and Privacy of Smart-City Mobile Applications through Model Inference, National Cybersecurity R&D (NCR) Programme, National Research Foundation (NRF) , PI (Project Level): David LO , Co-PI (Project Level): Debin GAO, 2016, S$399,984

Secure Mobile Centre - Technologies and Solutions for Securing Mobile Computing, National Cybersecurity R&D (NCR) Programme, National Research Foundation (NRF) , PI (Programme Level): Robert H DENG , PI (Project Level): DING Xuhua, Debin GAO, JIANG Lingxiao, LI Yingjiu, David LO, PANG Hwee Hwa, 2014, S$6,415,200

Improving Clone Detection for Systems Software, Merlion Programme, Republique Francaise, Institut Franais de Singapour , PI (Project Level): David LO , Co-PI (Project Level): JIANG Lingxiao, 2012, S$24,300

Operationalising “Responsible Artificial Intelligence” (RAI) in Public Administration, SMU Internal Grant, Ministry of Education (MOE) Tier 1 , PI (Project Level): Jason Grant ALLEN , Co-PI (Project Level): David LO, 2023, S$250,000

A-Things: Anomaly Analysis of the Internet of Things Applications, SMU Internal Grant, Ministry of Education (MOE) Tier 1 , PI (Project Level): SHAR Lwin Khin , Co-PI (Project Level): David LO, JIANG Lingxiao, 2020, S$99,057

Designing inclusive organizations: A cross-disciplinary approach, SMU Internal Grant, Ministry of Education (MOE) Tier 1 , PI (Project Level): Marko PITESA , Co-PI (Project Level): Gokhan ERTUG, 2019, S$128,510

Testing and Verification of Artificial Intelligence Systems, SMU Internal Grant, Ministry of Education (MOE) Tier 1 , PI (Project Level): David LO , Co-PI (Project Level): JIANG Lingxiao, SUN Jun, 2019, S$468,035

Semantic-Directed Deep Code Encoding for Smart Contract Debugging, SMU Internal Grant, Ministry of Education (MOE) Tier 1 , PI (Project Level): JIANG Lingxiao , Co-PI (Project Level): David LO, 2017, S$149,370

Software Reuse Insights for IT Businesses through Software Library Recommendation, SMU Internal Grant, Ministry of Education (MOE) Tier 1 , PI (Project Level): David LO , Co-PI (Project Level): JIANG Lingxiao, 2016, S$109,584

User-Centric Mobile Authentication Mechanisms, SMU Internal Grant, Ministry of Education (MOE) Tier 1 , PI (Project Level): Rajesh Krishna BALAN, 2009, S$9,408

Other Institutions

Making Software Development Language-Agnostic through Cross-Language Mapping and Migration, International Exchanges, The Royal Society PI (Project Level): JIANG Lingxiao, WANG Meng, Co-PI (Project Level): David LO, BUI DUY QUOC NGHI, Steven Ramsay, 2020, GBP12,000

vSCA: Scalable Code Analysis via Vector Abstraction and Concretization, MOE AcRF Tier 1, National University of Singapore PI (Project Level): David LO, KHOO Siau-Cheng, Co-PI (Project Level): JIANG Lingxiao, 2014, SGD130,000

Modeling Group Learning Phenomena and Effects in Open-Source Software Developments, Internal Research Centre, Internal Research Centre, SIS, SMU PI (Project Level): David LO, Co-PI (Project Level): JIANG Lingxiao, 2013

Automated Bug Fixing Assistant, Internal Research Centre, Internal Research Centre, SIS, SMU PI (Project Level): David LO, Co-PI (Project Level): JIANG Lingxiao, 2013

TEACHING

Courses Taught

Singapore Management University

Undergraduate Programmes :

IS Project Experience (Research)

Web Application Development I

Postgraduate Professional Programmes :

Capstone Project - Cybersecurity

Capstone Project - Data Science and Engineering

Capstone Project - Software and Cyber-Physical Systems

Postgraduate Research Programmes :

Empirical Research Project 1

Empirical Research Project 2

Empirical Research Project 3

Empirical Research Project 4

Empirical Research Project I

Empirical Research Project II

Empirical Research Project III

Software Mining and Analysis

THESES AND DISSERTATIONS

Theses and Dissertations Supervised

Singapore Management University

Supervisor, "Making Sense of Crowd-Generated Content in Domain-Specific Settings", Dissertation by AGUS SULISTYA, PhD in Information Systems, Singapore Management University, 2019

Supervisor, "Social Software Development: Insights and Solutions", Dissertation by ABHISHEK SHARMA, PhD in Information Systems, Singapore Management University, 2019

Supervisor, "Overfitting in Automated Program Repair: Challenges and Solutions", Dissertation by LE DINH XUAN BACH, PhD in Information Systems, Singapore Management University, 2018

Supervisor, "Recommending APIs for Software Evolution", Dissertation by FERDIAN THUNG, PhD in Information Systems, Singapore Management University, 2018

Supervisor, "Fusion Based Approaches for Software Fault Localization and Specification Mining", Dissertation by LE BUI TIEN DUY, PhD in Information Systems, Singapore Management University, 2017

Supervisor, "Testing and Debugging: A Reality Check", Dissertation by PAVNEET SINGH KOCHHAR, PhD in Information Systems, Singapore Management University, 2017

Supervisor, "Mining Bug Repositories for Automatic Software Bug Management: From Bug Triaging to Patch Backporting", Dissertation by TIAN YUAN, PhD in Information Systems, Singapore Management University, 2017

Supervisor, "Multimodal Code Search", Dissertation by WANG SHAOWEI, PhD in Information Systems, Singapore Management University, 2015

Supervisor, "Ranking-based Approaches for Localizing Faults", Dissertation by LUCIA, PhD in Information Systems, Singapore Management University, 2014

Other Institutions

Supervisor, "Statistical And Deep Learning Models For Software Engineering Corpora", Dissertation by HOANG Van Duc Thong, Singapore Management University, 2020

Theses and Dissertations Assessed

Singapore Management University

Committee Member, "Modeling Sequential and Basket-Oriented Associations for Top-K Recommendation", Dissertation by LE DUC TRONG, PhD in Information Systems, Singapore Management University, 2019

Committee Member, "Automatic Vulnerability Detection and Repair", Dissertation by MA SIQI, PhD in Information Systems, Singapore Management University, 2018

Committee Member, "Entity Summarization of Review and Micro-Reviews", Dissertation by NGUYEN THANH SON, PhD in Information Systems, Singapore Management University, 2018

Committee Member, "Scalable Online Kernel Learning", Dissertation by LU JING, PhD in Information Systems, Singapore Management University, 2018

Committee Member, "Mining Diverse Consumer Preferences for Bundling and Recommendation", Dissertation by DO HA LOC, PhD in Information Systems, Singapore Management University, 2017

Committee Member, "Aspect Discovery from Product Reviews", Dissertation by DING YING, PhD in Information Systems, Singapore Management University, 2017

Committee Member, "Probabilistic Models for Semantic Visualization and its Applications", Dissertation by LE VAN MINH TUAN, PhD in Information Systems, Singapore Management University, 2017

Committee Member, "Modeling Adoption Dynamics in Social Networks", Dissertation by LUU MINH DUC, PhD in Information Systems, Singapore Management University, 2017

Committee Member, "Profiling Social Media Users with Selective Self-disclosure Behaviour", Dissertation by GONG WEI, PhD in Information Systems, Singapore Management University, 2016

Committee Member, "Mining User Viewpoints in Online Discussions", Dissertation by QIU MINGHUI, PhD in Information Systems, Singapore Management University, 2015

Committee Member, "Generic Instance-specific Automated Parameter Tuning Framework", Dissertation by LINDAWATI, PhD in Information Systems, Singapore Management University, 2014

Committee Member, "Social Correlation in Latent Spaces for Complex Networks", Dissertation by CHUA CHONG TAT FREDDY, PhD in Information Systems, Singapore Management University, 2014

Committee Member, "Novel Techniques of Using Diversity in Software Security and Information Hiding", Dissertation by HAN JIN, PhD in Information Systems, Singapore Management University, 2012

Committee Member, "Predictive Modeling for Navigating Social Media", Dissertation by HU MEIQUN, PhD in Information Systems, Singapore Management University, 2012

EXTERNAL SERVICE – PROFESSIONAL

Program Co-Chair, 47th IEEE/ACM International Conference on Software Engineering (ICSE 2025), 2025

Co-Chair, Most Influential Paper Award Selection Committee, 40th ACM/IEEE International Conference on Automated Software Engineering (ASE'25), 2025 - Present

Committee/Board Member, 40th IEEE/ACM International Conference on Automated Software Engineering (ASE 2025), 33rd ACM International Conference on the Foundations on Software Engineerins (FSE 2025), 32nd IEEE International Conference on Software Analysis, Evolution and Reengineering (SANER 2025), Institute of Electrical and Electronics Engineers or Association for Computing Machinery (IEEE/ACM), 2025

General Co-Chair, 2nd ACM/IEEE International Conference on AI Foundation Models and Software Engineering (FORGE'25), 2025 - Present

Member, ACM Doctoral Dissertation Award Committee, Association for Computing Machinery (ACM), 2024 - 2027

Member, IEEE CS Fellow Search Committee , Institute of Electrical and Electronics Engineering (IEEE), 2024 - 2026

Program Co-Chair, 32nd ACM Joint European Software Engineering Conference and Symposium on the Foundations of Software Engineering (FSE 2024), 2024

Treasurer, Secretary, and Student Mentorship and Support Portfolio Chair, ACM SIGSOFT Executive Committee, Association for Computing Machinery (ACM), 2024 - 2027

Founding General Co-Chair, IEEE/ACM First International Conference on AI Foundation Models and Software Engineering (FORGE 2024), 2024

Co-Chair, Steering Committee , ACM/IEEE International Conference on AI Foundation Models and Software Engineering (FORGE), 2024 - Present

Co-Chair, New Faculty Symposium, 46th IEEE/ACM International Conference on Software Engineering (ICSE 2024), 2024 - Present

Committee/Board Member, 39th IEEE/ACM International Conference on Automated Software Engineering (ASE 2024), 46th ACM/IEEE International Conference on Software Engineering (ICSE 2024) [Main Track, SE in Society Track], 1st International Workshop on Large Language Models for Code (LLM4Code), 1st ACM International Conference on AI-Powered Software (AIWare 2024), Institute of Electrical and Electronics Engineers or Association for Computing Machinery (IEEE/ACM), 2024

Committee Member, MOE Translational R&D and Innovation Fund Evaluation Panel, Ministry of Education, 2023 - 2026

Early Research Achievement (ERA) Track Co-Chair, 30th IEEE International Conference on Software Analysis, Evolution and Reengineering (SANER 2023), 2023

Ideas, Vision, and Reflection (IVR) Track Co-Chair, 31st ACM Joint European Software Engineering Conference and Symposium on the Foundations of Software Engineering (ESEC/FSE 2023), 2023

Artifact Evaluation Track and ROSE Festival Co-Chair, 39th IEEE International Conference on Software Maintenance and Evolution (ICSME 2023), 2023

Area Co-Chair (AI and Software Engineering, 45th ACM/IEEE International Conference on Software Engineering (ICSE 2023), 2023

Test of Time Award Selection Committee Co-Chair, 31st ACM Joint European Software Engineering Conference and Symposium on the Foundations of Software Engineering (ESEC/FSE 2023), 2023

Sponsorship Co-Chair, 30th ACM Joint European Software Engineering Conference and Symposium on the Foundations of Software Engineering (ESEC/FSE 2022), 2022

Associate Editor, Communications of the ACM, Association of Computing Machinery (ACM), 2022 - Present

Committee/Board Member, 1st ACM/IEEE International Conference on AI Engineering - Software Engineering for AI (CAIN 2022), 15th IEEE International Conference on Software Testing (ICST 2022), 22nd IEEE International Conference on Software Quality, Reliability, and Security (QRS 2022), 14th Asia-Pacific Symposium on Internetware (Internetware 2022), 27th International Conference on Engineering of Complex Computer Systems (ICECCS 2022), 1st ACM/IEEE International Workshop on Software Engineering for Responsible Artificial Intelligence (SE4RAI 2022), Institute of Electrical and Electronics Engineers or Association for Computing Machinery (IEEE/ACM), 2022

General Chair, 19th ACM/IEEE International Conference on Mining Software Repositories (MSR 2022), 2022

Committee/Board Member, 44th ACM/IEEE International Conference on Software Engineering (ICSE 2022) [Main Track, Doctoral Symposium Track], 37th IEEE/ACM International Conference on Automated Software Engineering (ASE 2022) [Main Track, Student Research Competition Track], 36th AAAI Conference on Artificial Intelligence (AAAI 2022; Senior PC), 28th ACM SIGKDD International Conference on Knowledge Discovery and Data Mining (KDD 2022), 31th International Joint Conference on Artificial Intelligence (IJCAI 2022), 29th IEEE International Conference on Software Analysis, Evolution and Reengineering (SANER 2022), 29th Asia-Pacific Software Engineering Conference (APSEC 2022), Institute of Electrical and Electronics Engineers or Association for Computing Machinery (IEEE/ACM), 2022

Associate Editor, ACM Computing Surveys, Association of Computing Machinery (ACM), 2022 - Present

Co-Organizer, 2021 KDD Workshop on Programming Language Processing (PLP 2021), 2021

Vice Chairman, Steering Committee, IEEE/ACM International Conference on Automated Software Engineering (ASE), 2021 - Present

Chair, ACM SIGSOFT Awards, Association for Computing Machinery (ACM), 2021 - 2024

Member, SIGSOFT Executive Committee, Association for Computing Machinery (ACM), 2021 - 2024

Journal First Co-Coordinator, 29th IEEE/ACM International Conference on Program Comprehension (ICPC 2021), Institute of Electrical and Electronics Engineers or Association for Computing Machinery (IEEE/ACM), 2021

Selection Committee Member, ACM SIGSOFT Outstanding Dissertation Award, Association of Computing Machinery (ACM), 2021

Committee/Board Member, 21th IEEE International Conference on Software Quality, Reliability, and Security (QRS 2021), 28th Asia-Pacific Software Engineering Conference (APSEC 2021), 14th IEEE International Conference on Software Testing (ICST 2021) [Main Track, Tool Track], 14th Innovations in Software Engineering Conference (ISEC 2021), ACM Student Research Competition Grand Final, 21th International Conference on Runtime Verification (RV 2021), International Workshop on Software Architecture and Machine Learning (SAML 2021), Workshop on Software Engineering and AI for Data Quality in Cyber-Physical Systems (SEA4DQ 2021), Workshop on AI Engineering: Software Engineering for AI (WAIN 2021) , Institute of Electrical and Electronics Engineers or Association for Computing Machinery (IEEE/ACM), 2021

Selection Committee Member, ACM SIGSOFT Influential Educator Award, Association for Computing Machinery (ACM), 2021

Co-Organizer, 3rd International Workshop on Machine Learning Systems Engineering (iMLSE 2021), 2021

Registered Report Co-Chair, 18th ACM/IEEE International Conference on Mining Software Repositories (MSR 2021), Institute of Electrical and Electronics Engineers or Association for Computing Machinery (IEEE/ACM), 2021

Most Influential Paper Co-Chair, 36th IEEE/ACM International Conference on Automated Software Engineering (ASE 2021), Institute of Electrical and Electronics Engineers or Association for Computing Machinery (IEEE/ACM), 2021

Committee/Board Member, 27th ACM SIGKDD International Conference on Knowledge Discovery and Data Mining (KDD 2021), 35th AAAI Conference on Artificial Intelligence (AAAI 2021), 36th IEEE/ACM International Conference on Automated Software Engineering (ASE 2021), 43rd ACM/IEEE International Conference on Software Engineering (ICSE 2021) [NIER Track], 37th IEEE International Conference on Software Maintenance and Evolution (ICSME 2021), 28th IEEE International Conference on Software Analysis, Evolution and Reengineering (SANER 2021), 29th IEEE/ACM International Conference on Program Comprehension (ICPC 2021) [Most Influential Paper Track], Institute of Electrical and Electronics Engineers or Association for Computing Machinery (IEEE/ACM), 2021

Doctoral Symposium Co-Chair, 29th ACM Joint European Software Engineering Conference and Symposium on the Foundations of Software Engineering (ESEC/FSE 2021), Institute of Electrical and Electronics Engineers or Association for Computing Machinery (IEEE/ACM), 2021

Associate Editor, Automated Software Engineering , Springer, 2021 - Present

Co-Editor-in-Chief, Journal of Software Engineering Research and Development, 2020 - 2023

Committee/Board Member, 42nd ACM/IEEE International Conference on Software Engineering (ICSE 2020) [Main Track, Workshop Track, Student Research Competition Track], 14th Joint Meeting of the European Software Engineering Conference and the ACM SIGSOFT Symposium on the Foundations of Software Engineering (ESEC/FSE 2020) [Main Track, Doctoral Symposium Track], ACM Student Research Competition Grand Final, 26th ACM SIGKDD International Conference on Knowledge Discovery and Data Mining (KDD 2020), 29th International Joint Conference on Artificial Intelligence (IJCAI 2020), 40th IEEE International Conference on Distributed Computing Systems (ICDCS 2020), 25th International Conference on Engineering of Complex Computer Systems (ICECCS 2020), 20th International Conference on Runtime Verification (RV 2020), 17th ACM/IEEE International Conference on Mining Software Repositories (MSR 2020), 20th IEEE International Working Conference on Source Code Analysis and Manipulation (SCAM 2020), Institute of Electrical and Electronics Engineers or Association for Computing Machinery (IEEE/ACM), 2020

Committee/Board Member, IEEE International Conference on Software Quality, Reliability, and Security (QRS 2020), 27th Asia-Pacific Software Engineering Conference (APSEC 2020), IEEE International Conference on Software Analysis, Evolution and Reengineering (SANER 2020), IEEE International Conference on Software Testing (ICST 2020), 36th IEEE International Conference on Software Maintenance and Evolution (ICSME 2020), 12th Asia-Pacific Symposium on Internetware (Internetware 2020), Institute of Electrical and Electronics Engineers or Association for Computing Machinery (IEEE/ACM), 2020

Associate Editor, IEEE Transactions on Software Engineering, 2020 - 2024

Workshop Co-Chair, The ACM Joint European Software Engineering Conference and Symposium on the Foundations of Software Engineering (ESEC/FSE), 2020

Poster Co-Chair, IEEE International Conference on Software Testing, Verification and Validation (ICST), 2020

Journal First Co-Chair, IEEE International Conference on Software Maintenance and Evolution (ICSME), 2020

General Chair, 7th IEEE/ACM International Conference on Mobile Software Engineering and Systems (MOBILESoft), 2020

PC Co-Chair, 13th Innovations in Software Engineering Conference (ISEC), 2020

Committee Chair, 35th IEEE/ACM International Conference on Automated Software Engineering (ASE), Institute of Electrical and Electronics Engineers or Association for Computing Machinery (IEEE/ACM), 2020

Associate Editor, IEEE Transactions on Reliability, 2019 - 2025

Journal First Co-Coordinator, 13th Joint Meeting of the European Software Engineering Conference and the ACM SIGSOFT Symposium on the Foundations of Software Engineering (ESEC/FSE 2019), Institute of Electrical and Electronics Engineers (IEEE/ACM), 2019

Publicity Co-Chair, 13th ACM/IEEE International Symposium on Empirical Software Engineering and Measurement (ESEM), Institute of Electrical and Electronics Engineers or Association for Computing Machinery (IEEE/ACM), 2019

Tool Demonstration Co-Chair, 34th IEEE/ACM International Conference on Automated Software Engineering (ASE 2019), Institute of Electrical and Electronics Engineers or Association for Computing Machinery (IEEE/ACM), 2019

Workshop Co-Chair, ACM/IEEE International Conference on Software Engineering (ICSE 2019), Institute of Electrical and Electronics Engineers (IEEE), 2019

Committee Chair, 19th IEEE International Conference on Software Quality, Reliability, and Security (QRS 2019), Institute of Electrical and Electronics Engineers (IEEE), 2019

Committee Chair, 26th IEEE International Conference on Software Analysis, Evolution and Reengineering (SANER 2019), Institute of Electrical and Electronics Engineers (IEEE), 2019

Committee/Board Member, 41st ACM/IEEE International Conference on Software Engineering (ICSE 2019) [Main Track, Student Research Competition Track], 13th Joint Meeting of the European Software Engineering Conference and the ACM SIGSOFT Symposium on the Foundations of Software Engineering (ESEC/FSE 2019) [Main Track, Student Research Competition Track], 34th IEEE/ACM International Conference on Automated Software Engineering (ASE 2019), 16th ACM/IEEE International Conference on Mining Software Repositories (MSR 2019) [Data Showcase Track], 27th IEEE/ACM International Conference on Program Comprehension (ICPC 2019) [Replication Track], 28th International Joint Conference on Artificial Intelligence (IJCAI 2019), 19th IEEE International Working Conference on Source Code Analysis and Manipulation (SCAM 2019), Institute of Electrical and Electronics Engineers or Association for Computing Machinery (IEEE/ACM), 2019

Committee/Board Member, 24th International Conference on Engineering of Complex Computer Systems (ICECCS 2019), Annual Conference on Software Analysis, Testing and Evolution (SATE 2019), 19th International Conference on Runtime Verification (RV 2019), 10th IEEE International Workshop on Empirical Software Engineering in Practice (IWESEP 2019), ACM Student Research Competition Grand Final, 25th ACM SIGKDD International Conference on Knowledge Discovery and Data Mining (KDD 2019), Institute of Electrical and Electronics Engineers or Association for Computing Machinery (IEEE/ACM), 2019

Program Co-Chair, IEEE International Conference on Software Maintenance and Evolution (ICSME 2018), Institute of Electrical and Electronics Engineers (IEEE), 2018

Committee/Board Member, 40th ACM/IEEE International Conference on Software Engineering (ICSE 2018) [Main Track, NIER Track, Tool Track, Student Research Competition Track], 12th Joint Meeting of the European Software Engineering Conference and the ACM SIGSOFT Symposium on the Foundations of Software Engineering (ESEC/FSE 2018) [Main Track, Artifact Track, Tool Track], 33rd IEEE/ACM International Conference on Software Engineering (ASE 2018), 22nd International Conference on Evaluation and Assessment in Software Engineering (EASE 2018) [Short Paper Track], IEEE International Conference on Software Analysis, Evolution and Reengineering (SANER 2018) [Industry Track], 15th International Conference on Mining Software Repositories (MSR 2018), 27th International Joint Conference on Artificial Intelligence (IJCAI 2018), 32nd AAAI Conference on Artificial Intelligence (AAAI 2018), 24th ACM SIGKDD International Conference on Knowledge Discovery and Data Mining (KDD 2018), Institute of Electrical and Electronics Engineers or Association for Computing Machinery (IEEE/ACM), 2018

Committee Member, 18th IEEE International Working Conference on Source Code Analysis and Manipulation (SCAM 2018), 12th International Symposium on Empirical Software Engineering and Measurement 2018 (ESEM 2018) [Industry Track], 17th National Software Application Conference (NASAC 2018), 23rd International Conference on Engineering of Complex Computer Systems (ICECCS 2018), Annual Conference on Software Analysis, Testing and Evolution (SATE 2018), 18th International Conference on Runtime Verification (RV 2018), IEEE International Conference on Software Quality, Reliability, and Security (QRS 2018), 1st International Workshop on Machine Learning Systems Engineering (iMLSE 2018), 2018 IEEE International Workshop on Debugging and Repair (IDEAR 2018), 9th IEEE International Workshop on Empirical Software Engineering in Practice (IWESEP 2018), 4th International Workshop on Software Analytics (SWAN 2018), ACM Student Research Competition Grand Final, Institute of Electrical and Electronics Engineers or Association for Computing Machinery (IEEE/ACM), 2018

Publicity Chair, IEEE International Conference on Software Quality, Reliability and Security (QRS 2018), Institute of Electrical and Electronics Engineers (IEEE), 2018

Vice Co-Chair, 5th International Conference on Dependable Systems and Their Applications (DSA 2018), Institute of Electrical and Electronics Engineers (IEEE), 2018

Registration Chair, IEEE International Conference on Data Mining (ICDM 2018), Institute of Electrical and Electronics Engineers (IEEE), 2018

Co-Organizer, 7th International Workshop on Software Mining (SoftwareMining 2018), 2018

Editorial Board Member, Information and Software Technology, Elsevier, 2017 - Present

Publicity Co-Chair, 28th International Symposium on Software Reliability Engineering (ISSRE 2017), Institute of Electrical and Electronics Engineers (IEEE), 2017

Local Arrangement Co-Chair, 13th International Conference on Advanced Data Mining and Applications (ADMA 2017), 2017

Editorial Board Member, Journal of Software: Evolution and Process, Wiley, 2017 - Present

Doctoral Symposium Co-Chair, 33rd IEEE International Conference on Software Engineering (ICSME 2017), Institute of Electrical and Electronics Engineers (IEEE), 2017

Doctoral Symposium Co-Chair, 33rd International Conference on Software Maintenance and Evolution (ICSME 2017), Institute of Electrical and Electronics Engineers (IEEE), 2017

PC Co-Chair, 25th International Conference on Program Comprehension (ICPC 2017), Institute of Electrical and Electronics Engineers (IEEE), 2017

Program Co-Chair, 25th IEEE International Conference on Program Comprehension (ICPC 2017), Institute of Electrical and Electronics Engineers (IEEE), 2017

Tool Demonstration Co-Chair, 32nd IEEE/ACM International Conference on Automated Software Engineering (ASE 2017), Institute of Electrical and Electronics Engineers (IEEE), 2017

Selection Committee Member, Technical Council on Software Engineering (TCSE) Distinguished Service Award, Institute of Electrical and Electronics Engineers (IEEE), 2017

Committee Member, 32nd IEEE/ACM International Conference on Automated Software Engineering (ASE 2017) [Main Track, Doctoral Symposium Track], 21st Evaluation and Assessment in Software Engineering Conference (EASE 2017) [Short Paper Track], 33rd IEEE International Conference on Software Engineering (ICSME 2017) [NIER track], 24th Asia-Pacific Software Engineering Conference (APSEC 2017), 17th International Conference on Runtime Verification (RV 2017), 21st Computer Science and Software Engineering Conference (CSSE 2017), 22nd International Conference on Engineering of Complex Computer Systems (ICECCS 2017), 17th IEEE International Working Conference on Source Code Analysis and Manipulation (SCAM 2017), 11th International Symposium on Empirical Software Engineering and Measurement (ESEM 2017) [Industry Track, Poster and Short Paper Track], 11th Joint Meeting of the European Software Engineering Conference and the ACM SIGSOFT Symposium on the Foundations of Software Engineering (ESEC/FSE 2017) [Artifact Track], Institute of Electrical and Electronics Engineers (IEEE)/ACM, 2017

Co-Organizer, 6th International Workshop on Software Mining (SoftwareMining 2017), 2017

Committee Member, ACM Student Research Competition Final (ACM SRC 2017), 14th International Conference on Mining Software Repositories (MSR 2017), 23rd ACM SIGKDD Conference on Knowledge Discovery and Data Mining (KDD 2017), 4th International Workshop on Software Engineering Research and Industrial Practice (SER&IP 2017), 24th IEEE International Conference on Software Analysis, Evolution, and Reengineering (SANER 2017) [Main Track, Industry Track], IEEE Symposium on Visual Languages and Human-Centric Computing (VL/HCC 2017), 26th International Joint Conference on Artificial Intelligence (IJCAI 2017), Institute of Electrical and Electronics Engineers (IEEE)/ACM, 2017

Local Arrangement Co-Chair, 26th International Conference on Information and Knowledge Management (CIKM 2017), ACM, 2017

Editorial Board Member, Information Systems, Elsevier, 2016 - Present

Chairperson, 31st International Conference on Automated Software Engineering (ASE 2016), Institute of Electrical and Electronics Engineers (IEEE)/ACM, 2016

Short Paper Track Co-Chair, 24th International Conference on Program Comprehension (ICPC 2016), Institute of Electrical and Electronics Engineers (IEEE), 2016

Committee Member, 38th ACM/IEEE International Conference on Software Engineering (ICSE 2016), 24th IEEE International Conference on Program Comprehension (ICPC 2016), 7th International Workshop on Empirical Software Engineering in Practice (IWESEP 2016), 31st ACM Symposium on Applied Computing (SAC 2016) [Software Engineering Track], 22nd ACM SIGKDD Conference on Knowledge Discovery and Data Mining (KDD 2016), 16th SIAM International Conference on Data Mining (SDM 2016), 13th IEEE/ACM Working Conference on Mining Software Repositories (MSR 2016), 23rd IEEE International Conference on Software Analysis, Evolution and Reengineering (SANER 2016) [Main Track, ERA Track, Industry Track], Institute of Electrical and Electronics Engineers (IEEE)/ACM, 2016

Technology Briefings Co-Chair, 32nd International Conference on Software Maintenance and Evolution (ICSME 2016), Institute of Electrical and Electronics Engineers (IEEE), 2016

Publicity Co-Chair, 23rd International Conference on Software Analysis, Evolution and Reengineering (SANER 2016), Institute of Electrical and Electronics Engineers (IEEE), 2016

Committee Member, 23rd International Conference on Program Comprehension (ICPC 2015), Institute of Electrical and Electronics Engineers (IEEE), 2015

Committee Member, 22nd International Conference on Software Analysis, Evolution and Reengineering (SANER 2015) [Main Track, Tool Track], Institute of Electrical and Electronics Engineers (IEEE), 2015

Committee Member, 20th International Conference on Engineering of Complex Computer Systems (ICECCS 2015), ICECCS 2015, 2015

Committee Member, 12th Working Conference on Mining Software Repositories (MSR 2015) [Data Track], Institute of Electrical and Electronics Engineers (IEEE)/ACM, 2015

Committee Member, 37th International Conference on Software Engineering (ICSE 2015), Institute of Electrical and Electronics Engineers (IEEE)/ACM, 2015

PC Co-Chair, 15th Working Conference on Source Code Analysis and Manipulation, Institute of Electrical and Electronics Engineers (IEEE), 2015

Committee Member, 30th International Conference on Automated Software Engineering (ASE 2015), Institute of Electrical and Electronics Engineers (IEEE)/ACM, 2015

Committee Member, Working Conference on Source Code Analysis and Manipulation (for 3 years), Institute of Electrical and Electronics Engineers (IEEE), 2015

Committee Member, 22nd Asia-Pacific Software Engineering Conference (APSEC 2015), APSEC 2015, 2015

Committee Member, 9th International Symposium on Empirical Software Engineering and Measurement (ESEM 2015) [Industry Track], ESEM 2015, 2015

Committee Member, 30th Symposium on Applied Computing (SAC 2015) [Software Engineering Track], ACM, 2015

Committee Member, 19th Pacific-Asia Conference on Knowledge Discovery and Data Mining (PAKDD 2015), PAKDD 2015, 2015

Committee Member, 31st International Conference on Software Maintenance and Evolution (ICSME) [Main Track, ERA Track], Institute of Electrical and Electronics Engineers (IEEE), 2015

Committee Member, 5th Workshop on Mining Unstructured Data (MUD 2015), 2015

Committee Member, 21st SIGKDD Conference on Knowledge Discovery and Data Mining (KDD 2015), ACM, 2015

Associate Editor, Empirical Software Engineering, Springer, 2015 - Present

Workshop Co-Chair, 30th International Conference on Automated Software Engineering (ASE 2015), Institute of Electrical and Electronics Engineers (IEEE)/ACM, 2015

Committee Member, Joint Meeting of the 18th European Conference on Software Maintenance and Reengineering (CSMR 2014) and the 21st Working Conference on Reverse Engineering (WCRE 2014) [Main track, Project track], CSMR/WCRE, 2014

Committee Member, 20th SIGKDD Conference on Knowledge Discovery and Data Mining (KDD 2014), ACM, 2014

Committee Member, 29th International Conference on Automated Software Engineering (ASE 2014), Institute of Electrical and Electronics Engineers (IEEE)/ACM, 2014

Committee Member, 14th International Conference on Data Mining (SDM 2014), Society for Industrial and Applied Mathematics (SIAM), 2014

Committee Member, 11th Working Conference on Mining Software Repository (MSR 2014), MSR 2014, 2014

Committee Member, 22nd International Conference on Program Comprehension (ICPC 2014), ICPC 2014, 2014

Committee Member, 3rd Workshop on Graph Inspection and Traversal Engineering (GRAPHITE 2014), European Joint Conferences on Theory and Practice of Software (ETAPS), 2014

Committee Member, Workshop on Data Analysis Patterns in Software Engineering (DAPSE 2014), DAPSE 2014, 2014

Committee Member, 22nd SIGSOFT Symposium on Foundations on Software Engineering (FSE 2014) [SRC Track], ACM, 2014

Committee Member, 30th International Conference on Software Maintenance and Evolution (ICSME 2014), Institute of Electrical and Electronics Engineers (IEEE), 2014

Committee Member, 19th International Conference on Engineering Complex Computer System (ICECCS 2014), ICECCS 2014, 2014

Committee Member, 18th Pacific/Asia Conference on Knowledge Discovery and Data Mining (PAKDD 2014), PAKDD 2014, 2014

Committee Member, 37th International Conference on Software Engineering (ICSE 2014) [Mentoring], Institute of Electrical and Electronics Engineers (IEEE)/ACM, 2014

Committee Member, International Conference on Software Analysis, Evolution and Reengineering (SANER) (for 3 years), Institute of Electrical and Electronics Engineers (IEEE), 2014

Associate Editor, Neurocomputing Journal (Software Section), Elsevier, 2014 - 2024

Workshop and Tutorial Co-Chair, 28th IEEE/ACM International Conference on Automated Software Engineering (ASE 2013), Institute of Electrical and Electronics Engineers (IEEE)/ACM, 2013

Committee Member, 28th International Conference on Automated Software Engineering (ASE 2013), Institute of Electrical and Electronics Engineers (IEEE)/ACM, 2013

Committee Member, 19th SIGKDD Conference on Knowledge Discovery and Data Mining (KDD 2013), ACM, 2013

Committee Member, 17th Pacific/Asia Conference on Knowledge Discovery and Data Mining (PAKDD 2013), PAKDD 2013, 2013

Committee Member, 20th Working Conference on Reverse Engineering (WCRE 2013), WCRE 2013, 2013

Committee Member, 1st Workshop on Natural Language Analysis in Software Engineering (NaturaLiSE 2013), 1st Workshop on Natural Language Analysis in Software Engineering (NaturaLiSE 2013), 2013

Other, 21st International Conference on Program Comprehension (ICPC 2013) [Main track, ERA track], ICPC 2013, 2013

Committee Member, 10th Working Conference on Mining Software Repository (MSR 2013), MSR 2013, 2013

Committee Member, 30th International Conference on Software Maintenance and Evolution (ICSM 2013), Institute of Electrical and Electronics Engineers (IEEE), 2013

Committee Member, 13th Working Conference on Source Code Analysis and Manipulation (SCAM 2013) [Tool track], Institute of Electrical and Electronics Engineers (IEEE), 2013

Committee Member, 27th International Conference on Automated Software Engineering (ASE 2012), Institute of Electrical and Electronics Engineers (IEEE)/ACM, 2012

Sponsorship Chair, 4th Asian Conference on Machine Learning (ACML 2012), 4th Asian Conference on Machine Learning (ACML 2012), 2012

Committee Member, 9th International Conference on Mining Software Repository (MSR 2012), 9th International Conference on Mining Software Repository (MSR 2012), 2012

Committee Member, 34th International Conference on Software Engineering (ICSE 2012) [Informal Demo and Poster Track], ICSE 2012, 2012

Co-Chair, 1st International Workshop on Software Mining (SoftMine 2012), co-located with 18th ACM SIGKDD International Conference on Knowledge Discovery and Data Mining (KDD 2012), ACM, 2012

Committee Member, 16th Pacific-Asia Conference on Knowledge Discovery and Data Mining (PAKDD 2012), 16th Pacific-Asia Conference on Knowledge Discovery and Data Mining (PAKDD 2012), 2012

Committee Member, 28th International Conference on Software Maintenance (ICSM 2012) [ERA Track], ICSM 2012, 2012

Tool Demo Co-Chair, 19th Working Conference on Reverse Engineering (WCRE 2012), 19th Working Conference on Reverse Engineering (WCRE 2012), 2012

Committee Member, 8th International Conference on Mining Software Repository (MSR 2011), 8th International Conference on Mining Software Repository (MSR 2011), 2011

Committee Member, 9th International Workshop on Dynamic Analysis (WODA 2011), 9th International Workshop on Dynamic Analysis (WODA 2011), 2011

Committee Member, 17th SIGKDD International Conference on Knowledge Discovery and Data Mining (KDD 2011) [Industry Track], ACM, 2011

Sponsorship/Exhibition Co-Chair, 3rd International Conference on Social Informatics (SocInfo 2011), 3rd International Conference on Social Informatics (SocInfo 2011), 2011

Committee Member, 27th International Conference on Software Maintenance (ICSM 2011) [ERA Track], 27th International Conference on Software Maintenance (ICSM 2011) [ERA Track], 2011

Committee Member, 18th Working Conference on Reverse Engineering (WCRE 2011), Institute of Electrical and Electronics Engineers (IEEE), 2011

Committee Member, 26th International Conference on Automated Software Engineering (ASE 2011), Institute of Electrical and Electronics Engineers (IEEE)/ACM, 2011

Committee Member, 21st International Symposium on Software Reliability Engineering (ISSRE 2010) [Poster Track], Institute of Electrical and Electronics Engineers (IEEE), 2010

Committee Member, 16th SIGKDD International Conference on Knowledge Discovery and Data Mining (KDD 2010), ACM, 2010

Reviewer Journal Article, TSE, TOSEM, JSS, ASE J., TKDE, VLDB J., etc., 2009 - Present