Yuqun Zhang

Research Interests

Software Engineering

Educational History

The University of Texas at Austin, Austin, TX, USA

Ph.D, Electrical and Computer Engineering, August 2010 to December 2016
Advisor: Dr. Dewayne E. Perry

The University of Rochester, Rochester, NY, USA

M.S, Electrical and Computer Engineering, August 2008 to May 2010
Advisor: Dr. Wendi R. Heinzelman

Tianjin University, Tianjin, P.R. China

B.E, Communication Engineering, August 2004 to June 2008

Employment History

Southern University of Science and Technology, Shenzhen, Guangdong, P.R. China
Assistant professor in Computer Science & Engineering, February 2017 to present

China Resources Enterprise, Shenzhen, Guangdong, P.R. China
Software Developer, July 2012 - July 2013.

Professional recognitions and honors

- Tencent Outstanding Academic Advisor Award, 2023
- SUSTech Educational Reform Award, 2019
- ACM SIGSOFT Distinguished Paper Award, ISSTA 2019
- Top 20 Downloaded Paper of CCPE between 2017 and 2018
- UT ECE Outstanding Teaching Award, 2014

Selected Publications

Conference Publications (after joining SUSTech, "∗" indicates corresponding author, "_" indicates my supervised student in SUSTech)

[**ICSE'25**] Mingyuan Wu, Jiahong Xiang, Kunqiu Chen, Peng Di, Shin Hwei Tan, Heming Cui, and **Yuqun Zhang**∗. *Tumbling Down the Rabbit Hole: How do Assisting Exploration Strategies Facilitate Grey-box Fuzzing?*. Proceedings of the 47th IEEE/ACM International Conference on Software Engineering, 2025. (**CCF-A**).

[**ICSE'24**] Ling Jiang, Junwen An, Huihui Huang, Qiyi Tang, Sen Nie, Shi Wu, and **Yuqun Zhang**∗. *BinaryAI: Binary Software Composition Analysis via Intelligent Binary Source Code Matching*. Proceedings of the 46th IEEE/ACM International Conference on Software Engineering, 2024. (**CCF-A**).

[**EMNLP'24**] Hanzhuo Tan, Qi Luo, Jing Li, and **Yuqun Zhang**∗. *LLM4Decompile: Decompiling Binary Code with Large Language Models*. Proceedings of the 2024 Conference on Empirical Methods in Natural Language Processing. (**CCF-B**).

[**FSE'23a**] Mingyuan Wu, Kunqiu Chen, Qi Luo, Jiahong Xiang, Ji Qi, Junjie Chen, Heming Cui, and **Yuqun Zhang**∗. *Enhancing Coverage-guided Fuzzing via Phantom Program*. Proceedings of the 31st ACM Joint European Software Engineering Conference and Symposium on the Foundations of Software Engineering, 2023. (**CCF-A**).

[**FSE'23b**] Mingyuan Wu, Yicheng Ouyang, Minghai Lu, Junjie Chen, Yingquan Zhao, Heming Cui, Guowei Yang, and **Yuqun Zhang**∗. *SJFuzz: Seed & Mutator Scheduling for JVM Fuzzing*. Proceedings of the 31st ACM Joint European Software Engineering Conference and Symposium on the Foundations of Software Engineering, 2023. (**CCF-A**).

[**ISSTA'23a**] Ling Jiang, Hengchen Yuan, Qiyi Tang, Sen Nie, Shi Wu, and **Yuqun Zhang***. *Third-party Library Dependency for Large-scale SCA in the C/C++ Ecosystem: How Far Are We?*. Proceedings of the 32nd ACM SIGSOFT International Symposium on Software Testing and Analysis, 2023. (**CCF-A**).

[**ISSTA'23b**] Tianchang Gao, Junjie Chen, Yinquan Zhao, **Yuqun Zhang**, and Lingming Zhang. *Vectorizing Program Ingredients for Better JVM Testing*. Proceedings of the 32nd ACM SIGSOFT International Symposium on Software Testing and Analysis, 2023. (**CCF-A**).

[**ICSE'23a**] Ling Jiang, Hengchen Yuan, Mingyuan Wu, Lingming Zhang, and **Yuqun Zhang***. *Evaluating and Improving Hybrid Fuzzing*. Proceedings of the 45th IEEE/ACM International Conference on Software Engineering, 2023. (**CCF-A**).

[**ICSE'23b**] Mingyuan Wu, Minghai Lu, Heming Cui, Junjie Chen, **Yuqun Zhang***, and Lingming Zhang. *JITfuzz: Coverage-guided Fuzzing for JVM Just-in-Time Compilers*. Proceedings of the 45th IEEE/ACM International Conference on Software Engineering, 2023. (**CCF-A**).

[**ICSE'23c**] Yicheng Ouyang, Kailai Shao, Kunqiu Chen, Ruobing Shen, Chao Chen, Mingze Xu, **Yuqun Zhang***, and Lingming Zhang. *MirrorTaint: Practical Non-intrusive Dynamic Taint Tracking for JVM-based Microservice Systems*. Proceedings of the 45th IEEE/ACM International Conference on Software Engineering, 2023. (**CCF-A**).

[**ICSE SEIP'23**] Zhengran Zeng, **Yuqun Zhang**, Yong Xu, Minghua Ma, Bo Qiao, Wentao Zou, Qingjun Chen, Meng Zhang, Xu Zhang, Hongyu Zhang, Xuedong Gao, Hao Fan, Saravan Rajmohan, Qingwei Lin, and Dongmei Zhang. *TraceArk: Towards Actionable Performance Anomaly Alerting for Online Service Systems*. Proceedings of the 45th IEEE/ACM International Conference on Software Engineering, Software Engineering in Practice, 2023. (**CCF-A**, SEIP track).

[**ISSTA'22**] Zhengran Zeng, Hanzhuo Tan, Haotian Zhang, Jing Li, **Yuqun Zhang***, and Lingming Zhang. *An Extensive Study on Pre-trained Models for Program Understanding and Generation*. Proceedings of the 31st ACM SIGSOFT International Symposium on Software Testing and Analysis, 2022. (**CCF-A**).

[**ICSE'22a**] Mingyuan Wu, Ling Jiang, Jiahong Xiang, **Yuqun Zhang***, Guowei Yang, Huixin Ma, Sen Nie, Shi Wu, Heming Cui, and Lingming Zhang. *Evaluating and Improving Neural Program-Smoothing-based Fuzzing*. Proceedings of the 44th IEEE/ACM International Conference on Software Engineering, 2022. (**CCF-A**).

[**ICSE'22b**] Mingyuan Wu, Ling Jiang, Jiahong Xiang, Yanwei Huang, Heming Cui, Lingming Zhang, and **Yuqun Zhang***. *One Fuzzing Strategy to Rule Them All*. Proceedings of the 44th IEEE/ACM International Conference on Software Engineering, 2022. (**CCF-A**).

[**ICSE'22c**] Yingquan Zhao, Zan Wang, Junjie Chen, Mengdi Liu, Mingyuan Wu, **Yuqun Zhang**, and Lingming Zhang. *History-Driven Test Program Synthesis for JVM Testing*. Proceedings of the 44th IEEE/ACM International Conference on Software Engineering, 2022. (**CCF-A**).

[**ICSOC'22a**] Francisco Ramirez, Carlos Mera-Gomez, Shengsen Chen, Rami Bahsoon, **Yuqun Zhang**. *Semantics-Driven Learning for Microservice Annotations*. Proceedings of the 20th International Conference on Service-Oriented Computing, 2022. (**CCF-B**, research short paper).

[**ICSOC'22b**] Francisco Ramirez, Carlos Mera-Gomez, Rami Bahsoon, **Yuqun Zhang**. *Mining the Limits of Granularity for Microservice Annotations*. Proceedings of the 20th International Conference on Service-Oriented Computing, 2022. (**CCF-B**, research short paper).

[**ISSTA'21**] Zhengran Zeng, **Yuqun Zhang***, Haotian Zhang, and Lingming Zhang. *Deep Just-in-Time Defect Prediction: How Far Are We?* Proceedings of the ACM SIGSOFT International Symposium on Software Testing and Analysis, 2021. (**CCF-A**, **Nominated for ACM SIGSOFT Distinguished Paper Award**).

[**DAC'21**] Yaswanth Yadlapalli, Husheng Zhou, **Yuqun Zhang**, and Cong Liu. *gGuard: Enabling Leakage-Resilient Memory Isolation in GPU-accelerated Autonomous Embedded Systems*. Proceedings of the 58th Design Automation Conference, 2021. (**CCF-A**).

[**ICSE'21 Workshop**] Francisco Ramirez, Carlos Mera-Gomez, Rami Bahsoon, and **Yuqun Zhang***. *An Empirical Study on Microservice Software Development*. Proceedings of Joint 9th International Workshop on Software Engineering for Systems-of-Systems and 15th Workshop on Distributed Software

Development, Software Ecosystems and Systems-of-Systems (SESoS/WDES 2021), co-located with the 43rd International Conference on Software Engineering (ICSE 2021).

[ICSE'20a] Mingyuan Wu, Yicheng Ouyang, Husheng Zhou, Lingming Zhang, Cong Liu and **Yuqun Zhang***. *Simulee: Detecting CUDA Synchronization Bugs via Memory-Access Modeling.* Proceedings of the 42nd IEEE/ACM International Conference on Software Engineering, 2020. (**CCF-A**).

[ICSE'20b] Husheng Zhou, Wei Li, Yuankun Zhu, **Yuqun Zhang**, Bei Yu, Lingming Zhang and Cong Liu. *DeepBillboard: Systematic Physical-World Testing of Autonomous Driving Systems.* Proceedings of the 42nd IEEE/ACM International Conference on Software Engineering, 2020. (**CCF-A**)

[ASE'19] Mingyuan Wu, Lingming Zhang, Cong Liu, Shin Hwei Tan, and **Yuqun Zhang***. *Automating CUDA Synchronization via Program Transformation.* Proceedings of the 34th IEEE/ACM International Conference on Automated Software Engineering, 2019. (**CCF-A**)

[ISSTA'19] Xia Li, Wei Li, **Yuqun Zhang***, and Lingming Zhang. *DeepFL: integrating multiple fault diagnosis dimensions for deep fault localization.* Proceedings of the 28th ACM SIGSOFT International Symposium on Software Testing and Analysis, 2019. (**CCF-A**, **ACM SIGSOFT Distinguished Paper Award**)

[ASE'18] Mengshi Zhang, **Yuqun Zhang***, Lingming Zhang, Cong Liu, and Sarfraz Kurshid. *DeepRoad: GAN-based metamorphic testing and input validation framework for autonomous driving systems.* Proceedings of the 33rd IEEE/ACM International Conference on Automated Software Engineering, 2018. (**CCF-A**)

[COMPSAC'18] Nidhiben Solanki, Yongtao Huang, I-Ling Yen, Farokh B. Bastani, and **Yuqun Zhang***. *Resource and Role Hierarchy Based Access Control for Resourceful Systems.* Proceedings of the IEEE 42nd Annual Computer Software and Applications Conference, 2018. (**CCF-C**)

[SOSE'18] I-Ling Yen, Farokh B. Bastani, Wei Zhu, Hessam Moeini, San-Yih Hwang, and **Yuqun Zhang***. *Service-Oriented IoT Modeling and Its Deviation from Software Services.* Proceedings of the 12th IEEE Symposium on Service-Oriented System Engineering, 2018.

[ICWS'17a] **Yuqun Zhang**, Mengshi Zhang, Xi Zheng, and Dewayne E. Perry. *Service2vec: A Vector Representation for Web Services.* Proceedings of the 24th IEEE International Conference on Web Services, 2017. (**CCF-B**, short paper)

[ICWS'17b] Wei Zhu, Farokh B. Bastani, I-Ling Yen, Jicheng Fu, and **Yuqun Zhang***. *Automated Holistic Service Composition: Modeling and Composition Reasoning Techniques.* Proceedings of the 24th IEEE International Conference on Web Services, 2017. (**CCF-B**)

[ICWS'17c] I-Ling Yen, Farokh B. Bastani, Yongtao Huang, **Yuqun Zhang**, and Xin Yao. *SaaS for Automated Job Performance Appraisals Using Service Technologies and Big Data Analytics.* Proceedings of the 24th IEEE International Conference on Web Services, 2017. (**CCF-B**)

[ISPA'17] Xi Zheng, Jiaojiao Jiang, **Yuqun Zhang***, Yao Deng, Min Fu, Tianlei Zheng, and Xiao Liu. *SmartVM: A Multi-Layer Microservice-Based Platform for Deploying SaaS.* Proceedings of the 15th IEEE International Symposium on Parallel and Distributed Processing with Applications, 2017. (**CCF-C**)

[SOSE'17] I-Ling Yen, Shuai Zhang, Farokh B. Bastani, and **Yuqun Zhang***. *A Framework for IoT-Based Monitoring and Diagnosis of Manufacturing Systems.* Proceedings of the 11th IEEE Symposium on Service-Oriented System Engineering, 2017.

[CBD'17] Tianlei Zheng, **Yuqun Zhang***, Xi Zheng, Min Fu, and Xiao Li. *BigVM: A Multi-Layer-Microservice-Based Platform for Deploying SaaS.* Proceedings of the Fifth International Conference on Advanced Cloud and Big Data, 2017.

Journal Publications (after joining SUSTech, "*" indicates corresponding author, "_" indicates my supervised student in SUSTech)

[**JOS'24**] Jiahong Xiang, Xiaoyang Xu, Fanchu Kong, Pai Peng, Zhao Zhang, **Yuqun Zhang***. *A Comprehensive Review of the Application and Development of Large Language Models in Software Defect Detection and Repair*. Joural of Software, 2024 (**CCF-A**, in Chinese)

[**TNNLS'24**] Hanzhuo Tan, Chunpu Xu, Jing Li, **Yuqun Zhang**, Zeyang Fang, Zeyu Chen, and Baohua Lai. *HICL: Hashtag-Driven In-Context Learning for Social Media Natural Language Understanding*. IEEE Transactions on Neural Networks and Learning Systems, 2024 (**CCF-B**)

[**TOSEM'20**] Paola Yanez, Rami Bahsoon, **Yuqun Zhang***, and Rick Kazman. *Architecting Internet of Thing Systems with Blockchain: A Catalog of Tactics*. ACM Transactions on Software Engineering and Methodology, 2020 (**CCF-A**)

[**JSA'20**] Zexin Li, **Yuqun Zhang***, Ao Ding, Husheng Zhou, and Cong Liu. *Efficient Algorithms for Task Mapping on Heterogeneous CPU/GPU Platforms for Fast Completion Time*, Journal of System Architecture, 2020 (**CCF-B**)

[**TSE'20**] Wenhua Wang, **Yuqun Zhang***, Yulei Sui, Yao Wan, Jian Wu, Philip Yu, and Guandong Xu. *Reinforcement-Learning-Guided Source Code Summarization via Hierarchical Attention Network*, IEEE Transactions on Software Engineering, 2020 (**CCF-A**)

[**IoTJ'20**] Paola Yanez, Md Redowan Mahmud, **Yuqun Zhang***, Rami Bahsoon, and Rajkumar Buyya. *Data Allocation Mechanism for Internet of Things Systems with Blockchain*. IEEE Internet of Things Journal, 2020 (**SCI-I**)

[**TSE'19**] Mengshi Zhang, Yaoxian Li, Xia Li, Lingchao Chen, **Yuqun Zhang***, Lingming Zhang, and Sarfraz Khurshid. *An Empirical Study of Boosting Spectrum-based Fault Localization via PageRank*. IEEE Transactions on Software Engineering, 2019. (**CCF-A**)

[**TPDS'19**] Zheng Dong, Cong Liu, Soroush Bateni, Zelun Kong, Liang He, Lingming Zhang, Ravi Prakash, and **Yuqun Zhang***. *A General Analysis Framework for Soft Real-Time Tasks*. IEEE Transactions on Parallel and Distributed Systems, 2019. (**CCF-A**)

[**WWWJ'19**] Tianlei Zheng, Xi Zheng, **Yuqun Zhang***, Yao Deng, ErXi Dong, Rui Zhang, and Xiao Liu. *SmartVM: a SLA-aware microservice deployment framework*. World Wide Web: Internet and Web Information Systems, 2019. (**CCF-B**)

[**STTT'19**] Jinru Hua, Yushan Zhang, **Yuqun Zhang***, and Sarfraz Khurshid. *EdSketch: execution-driven sketching for Java*. International Journal on Software Tools for Technology Transfer, 2019. (**CCF-C**)

[**CCPE'18**] Dongjin Yu, Yike Jin, **Yuqun Zhang***, and Xi Zheng, *A survey on security issues in services communication of Microservicesenabled fog applications*. Concurrency and Computation: Practice and Experience, 2018. (**CCF-C**, **Top 20 Downloaded Paper between 2017 and 2018**)

Publications (before joining SUSTech)

1. **Yuqun Zhang** and Dewayne E. Perry. *Predicting Inventory Shipments of Oracle EBS Systems*. Proceedings of the 13th IEEE International Conference on Services Computing (**SCC, CCF-C**), 2016.
2. **Yuqun Zhang** and Dewayne E. Perry. *Generating Symbolic Business Processes in Support of Evaluating Process Optimization*. Proceedings of the 12th IEEE International Conference on Services Computing (**SCC, CCF-C**), 2015.
3. **Yuqun Zhang** and Dewayne E. Perry. *A Data-Centric Approach to Optimize Time in Workflow-Based Business Process*. Proceedings of the 11th IEEE International Conference on Services Computing (**SCC, CCF-C**), 2014.
4. **Yuqun Zhang** and Dewayne E. Perry. *A Goal-Directed Modeling Technique towards Business Process*. Proceedings of the 8th IEEE Symposium on Service-Oriented System Engineering (**SOSE**), 2014.

5. **Yuqun Zhang** and Chien-Liang Fok. *Receiver-based heading: Towards on-line energy efficient duty cycle assignments.* Proceedings of the 55th IEEE Global Communications Conference (**Globecom, CCF-C**), 2012.
6. Chen-Hsiang Feng, **Yuqun Zhang**, Ilker Demirkol, and Wendi R. Heinzelman, *Stateless Multicast Protocol for Ad Hoc Networks*, IEEE Transactions on Mobile Computing (**TMC, CCF-A**), 2012.
7. **Yuqun Zhang**, Chen-Hsiang Feng, Ilker Demirkol, and Wendi R. Heinzelman. *Energy-Efficient Duty Cycle Assignment for Receiver-Based Convergecast in Wireless Sensor Networks.* Proceedings of the 53th IEEE Global Communications Conference (**Globecom, CCF-C**), 2010.

Teaching

Achievements

Ling Jiang (2nd-year Master Student), the Tencent Rhino-Bird Scholarship Awardee (6 out of 70+ Rhino-Bird Talents), Summer 2023

SUSTech Educational Reform Award, Fall 2019

Classroom Teaching

2017-2024, Fall, CS309, Object-oriented Analysis and Design (**Massive Media Coverage by CCTV.com, ByteDance, Weibo, Beijing Youth Daily, Sohu, etc. in Spring 2019**)

2017-2018, Spring, CS304, Software Engineering

2017, 2019-2024, Spring, CS102, Introduction to Programming

2018, Fall, CSE5008, Advanced Software Engineering

Student Competitions

China National Software Testing Contest 2019, First Prize (2), Second Prize (6), co-supervisor

Software Testing Contest, QRS 2019, First Place, Second Place, co-supervisor

Software Testing Contest, ISSTA 2019, First Place, Third Place, Fifth Place, Ninth Place, co-supervisor

Software Testing Contest, ICST 2019, First Place, Third Place, Sixth Place, co-supervisor

China National Software Testing Contest 2018, First Prize, Second Prize (2), co-supervisor

Supervised Students

Doctoral graduates

Wenhua Wang, Spring 2022
First Employment: PostDoc in Beijing Normal University, China

Paola Yanez, Summer 2022
First Employment: Teaching fellow in University of Birmingham, UK

Masters

Ling Jiang, Spring 2024
First Employment: Software Engineer in Tencent Keen Lab

Zhengran Zeng, Spring 2023

First Employment: PhD student in Peking University

Jia Zou, Spring 2022
First Employment: Jiangxi Agricultural Bank

Mingyuan Wu, Spring 2020
First Employment: Joint PhD student with University of Hong Kong

Erxi Dong, Fall 2019
First Employment: City Government of Dongguan, Guangdong

Shiwei Yan, Spring 2019
First Employment: Software Engineer in Tencent

Representative Undergraduates

Jiefang Lin, Spring 2024
First Employment: PhD student in UT Austin

Junwen An, Spring 2024
First Employment: PhD student in National University of Singapore

Huihui Huang, Spring 2024
First Employment: PhD student in Singapore Management University

Yingwei Zheng, Spring 2024
First Employment: Master student in SUSTech

Xiaolong Tian, Spring 2024
First Employment: Master student in SUSTech

Hengcheng Yuan, Spring 2023
First Employment: PhD student in UT Austin

Minghai Lu, Spring 2023
First Employment: PhD student in Purdue University

Kunqiu Chen, Spring 2023
First Employment: Master student in SUSTech

Jiahong Xiang, Spring 2022
First Employment: Master student in SUSTech

Zizheng Zhan, Spring 2022
First Employment: Kwai

Haoyang Huang, Spring 2022
First Employment: Master student in SUSTech

Zhuochen Xiong, Spring 2022
First Employment: ByteDance

Ling Jiang, Spring 2021
First Employment: Master student in SUSTech

Xinghe Yao, Spring 2021
First Employment: Bytedance

Qiuqi Wu, Spring 2021
First Employment: Tecent Wechat

Zexin Li, Spring 2020
First Employment: PhD student in Computer Science in the University of Texas at Dallas, USA

Yicheng Ouyang, Spring 2020
First Employment: PhD student in Computer Science in the University of Illinois, Urbana-Champaign, USA

Zhengran Zeng, Spring 2020
First Employment: Master student in SUSTech

Tianzuo Luo, Spring 2020
First Employment: Master student in National University of Singapore, Singapore

Tiankai Jiang, Spring 2019
First Employment: Master student in Computer Science in Carnegie Mellon University, USA

Zehuai Wang, Spring 2019
First Employment: Tencent

Yushan Zhang, Spring 2018
First Employment: PhD student in Computer Science in Hong Kong University of Science and Technology

Manli Ran, Spring 2018
First Employment: Master student in Computer Science in the University of California at Riverside, USA

Academic Talks

1. Invited talk, "Applying LLMs in automatic program repair and decompiling", The 2024 AI+ Development Digital Summit, Shenzhen, Guangdong, China, 9 November 2024
2. Invited talk, "Code search" and "Large language model pre-training", The Forum of Kuaishou LLM Foundation, The Chinese National Computer Congress 2024, Hengdian, Zhejiang, China, 26 October 2024
3. Invited talk, "Towards some fun facts of fuzzing", The CCF TCSE Young Scholar Forum, the Chinese University of Hong Kong (Shenzhen), Shenzhen, Guangdong, China, 20 August 2024
4. Invited talk, "BinaryAI: Binary Software Composition Analysis via Intelligent Binary Source Code Matching", Global Lunch Semimar, Shanghai Jiaotong University, Shanghai, China, 17 May 2024
5. Keynote Speech, "Towards some fun facts of fuzzing", The 8th National Youth Artificial Intelligence Innovation and Entrepreneurship Forum, Harbin Institute of Technology (Shenzhen), Shenzhen, Guangdong, China, 18 December 2023
6. Invited online panel, "Towards some fun facts of fuzzing", Fudan University, Shanghai, China, 16 August 2023
7. Invited talk, "Towards some fun facts of fuzzing", National Key Laboratory of Software Engineering, Nanjing University, Nanjing, China, 20 July 2023
8. Invited talk, "Coverage-guided fuzzing for JVM just-in-time compilers", The 1st National Compiler Forum, Tianjin University, Tianjin, China, 16 July 2023
9. Invited talk, "Towards some fun facts of fuzzing", Fudan University, Shanghai, China, 14 July 2023
10. Invited talk, "Towards some fun facts of fuzzing", Shanghai Jiaotong University, Shanghai, China, 13 July 2023

11. Invited talk, "Towards some fun facts of fuzzing", East China Normal University, Shanghai, China, 12 July 2023
12. Invited talk, "Demystifying fuzzing strategies", Tsinghua University, Beijing, China, 7 May 2023
13. Invited talk, "Demystifying fuzzing strategies", Beihang University, Beijing, China, 5 May 2023
14. Invited talk, "Demystifying fuzzing strategies", Institute of Software, Chinese Academy of Sciences, Beijing, China, 4 May 2023
15. Departmental seminar, "Demystifying fuzzing strategies", Department of Computer Science and Engineering, Chinese University of Hong Kong, Hong Kong, China, 31 March 2023
16. PurPL seminar, "Demystifying fuzzing strategies", Department of Computer Science, Purdue University, Lafayett, Indianna, Unite States (online), 25 Feburary 2023
17. SE seminar, "Demystifying fuzzing strategies", Department of Computer Science, the University of Southern California, Los Angeles, CA, Unite States (online), 3 December 2022
18. Top Conference/Journal Forum, "Demystifying fuzzing strategies", CCF Chinasoft 2022, Shanghai (online), China, 25 November 2022
19. CTF colloquium, "Demystifying fuzzing strategies", School of Computing and Augmented Intelligence, the Arizona State University, Tempe, Arizona (online), United States, 1 November 2022
20. Guest Research Talk, "Demystifying fuzzing strategies", College of Information Science and Technology, the Pennsylvania State University, University Park, Pennsylvania (online), United States, 19 October 2022
21. ECE Colloquium, "Demystifying fuzzing strategies", The University of California, Riverside, Riverside, California (online), United States, 11 October 2022
22. Invited talk, "Demystifying fuzzing strategies", Beijing Institute of Technology, Beijing (online), China, 28 June 2022
23. Invited talk, "Demystifying fuzzing strategies", Department of Computer Science, the University of Texas at Dallas, Richardson, TX (online), United States, 11 June 2022
24. Invited talk, "Demystifying fuzzing strategies", Xi'An Jiaotong University, Xi'An (online), China, 1 June 2022
25. Invited talk, "Demystifying fuzzing strategies", Tianjin University, Tianjin (online), China, 30 May 2022
26. Invited talk, "Demystifying fuzzing strategies", Northeastern University, Shenyang (online), China, 25 May 2022
27. Invited talk, "Demystifying fuzzing strategies", CCF TCSE Young Scholar Forum (online), China, 22 May 2022
28. Invited talk, "Demystifying fuzzing strategies", Harbin Institute of Technology, Harbin (online), China, 19 May 2022
29. Invited talk, "Demystifying fuzzing strategies", Northwest University, Xi'an (online), China, 10 May 2022
30. Invited talk, "Autonomous Driving Testing based on Metamorphic Testing", 3rd National Forum of Metamorphic Testing, Wuhan University, Wuhan, China, Oct 2020
31. Invited talk, "Systematic physical testing for autonomous driving systems", China Academy of Sciences, Beijing, China, Dec 2019
32. Invited talk, "Systematic physical testing for autonomous driving systems", 2nd National Forum of Artificial Intelligence-oriented Software Engineering, Nanjing University, Nanjing, China, Sep 2019
33. Invited talk, "Systematic physical testing for autonomous driving systems", South China University of Technology, Guangzhou, China, Feb 2019

34. Paper presentation, "DeepRoad: GAN-based metamorphic testing and input validation framework for autonomous driving systems", 33rd IEEE/ACM International Conference on Automated Software Engineering, Montpelier, France, Sep 2018 (ASE'18)

OTHER

Technical Program Committee and Review Services

Technical Program Committee Member:

2026 ICSE

2025 ICSE, ISSTA, ASE, ICSE LLM4Code Workshop

2024 ISSTA, FSE Demo, ICSE LLM4Code Workshop, ISSRE, QRS

2023 ISSRE, QRS

2022 ICSE Demo, ISSRE, QRS, RAIS, SANER Demo

2020 Percom WiP, ECAI (Senior PC)

2019 ICCCN

2017 IEEE Service Congress, SAC

Reviewers:

2024 TSE, TOSEM

2022 TSE, ASEJ, Journal of Software: Evolution and Process

2021 JSS, TSE

2020 ICSE, FSE, T-ITS, IST

2019 ASE, ISSTA, TSE, TR, TSC, TPDS, FGCS

2018 ASE