



Lili Quan

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✉ Tianjin University 🎓 Ph.D. Student 🎓 1997-03-12
GitHub: github.com/liliquan0118

🎓 Education/Research Experience

2026.12	Postdoctoral Researcher, Singapore Management University
2025.12	Group: Prof.Xiaofei Xie
2025.11	Ph.D. Student, Tianjin University
2021.09	College of Intelligence and Computing. Advisor: Prof. Xiaohong Li
2021.09	Master, Tianjin University
2018.06	College of Intelligence and Computing
2018.09	Bachelor, Tianjin University of Finance and Economics
2014.06	School of Computer Science and Technology

📘 Research Interests

- **Protocol Security and Testing**
 - Fuzzing for Protocol Software
 - Detection of Protocol Software Defects
- **Testing of Deep Learning Frameworks**
 - Understanding of Bugs in JavaScript-based Deep Learning Frameworks
 - Detection of Defects in JavaScript-based Deep Learning Frameworks
- **Testing of Deep Learning Models**
 - Fairness Testing and Repair

🏅 Awards

2015.10	Merit Student
2016.10	National Encourage scholarship
2019.05	Second Prize of Information Security Network Attack and Defense Competition
2021.09	Doctoral Special Fellowship of Tianjin University

📄 Publications

1. **Lili Quan**, Qianyu Guo, Hongxu Chen, Xiaofei Xie, Xiaohong Li, Yang Liu, and Jing Hu. SADT: syntax-aware differential testing of certificate validation in SSL/TLS implementations. In 2020 35th IEEE/ACM International Conference on Automated Software Engineering (ASE'2020), pages 524-535. IEEE, 2020. **[CCF-A]**
2. **Lili Quan**, Qianyu Guo, Xiaofei Xie, Sen Chen, Xiaohong Li, and Yang Liu. Towards Understanding the Faults of JavaScript-Based Deep Learning Systems. In Proceedings of the 37th IEEE/ACM International Conference on Automated Software Engineering (ASE '22). **[CCF-A]**
3. **Lili Quan**, Xiaofei Xie, Qianyu Guo, Lingxiao Jiang, Sen Chen, Junjie Wang, and Xiaohong Li. TensorJSFuzz: Effective Testing of Web-Based Deep Learning Frameworks via Input-Constraint Extraction. In Proceedings of the Web Conference, Accepted. (WWW'25). **[CCF-A]**
4. **Lili Quan**, Tianlin Li, Xiaofei Xie, Zhenpeng Chen, Xiaofei Xie, Sen Chen, Lingxiao Jiang, Xiaohong Li. Dissecting Global Search: A Simple Yet Effective Method to Boost Individual Discrimination Testing and Repair. In Proceedings of the 47th IEEE/ACM International Conference on Software Engineering, 2025, Accepted. (ICSE'25). **[CCF-A]**
5. Yuekun Wang, **Lili Quan**, Xiaofei Xie, Junjie Wang, Jianjun Chen, SPEC2CODE: Mapping Protocol Specification to Function-Level Code Implementation, In 2020 40th IEEE/ACM International Conference on Automated Software En-

gineering (ASE 2025)[**CCF-A**]

6. **Lili Quan**, Jin Wen, Qiang Hu, Maxime Cordy, Yuheng Huang, Lei Ma, Xiaohong Li, Evaluation and Improvement of Test Selection for Large Language Models, In Journal of Software: Evolution and Process. (2025)[**CCF-B**]