



## Lili Quan

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Tianjin University Ph.D. Student 1997-03-12  
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### Education/Research Experience

present	<b>Ph.D. Student</b> , Tianjin University • Expected graduation before 2025.01
2021.09	College of Intelligence and Computing. Advisor: Prof. Xiaohong Li
2021.09	<b>Master</b> , Tianjin University
2018.06	College of Intelligence and Computing
2018.09	<b>Bachelor</b> , 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

- 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]
- 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]
- 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]
- 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]