

Zhechang Zhang

Ph.D. Student
College of Information Sciences and Technology
The Pennsylvania State University

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EDUCATION

- **The Pennsylvania State University** Pennsylvania, USA
Ph.D. Student in Informatics; GPA: 3.97/4.00 Aug 2023 - Present
Research Area: System Security
Advisor: Hong Hu
- **Huazhong University of Science and Technology** Wuhan, China
Master of Engineering in Cyber Security; GPA: 3.77/4.00 (85.95/100) Sept 2020 - June 2023
Thesis: Research on Vulnerability Discovery in Deep Packet Inspection Systems
Advisor: Deqing Zou and Bin Yuan
- **Huazhong University of Science and Technology** Wuhan, China
Bachelor of Engineering in Information Security; GPA: 3.95/4.00 (90.7/100 - Rank: 1st/78) Sept 2016 - June 2020
Thesis: Fuzzing for Signature-based Network Intrusion Detection Systems

RESEARCH INTEREST

Software Security, System Security and Fuzzing

REFEREED CONFERENCE PROCEEDINGS

- 1 Shuangpeng Bai, **Zhechang Zhang**, and Hong Hu. Countdown: Refcount-guided Fuzzing for Exposing Temporal Memory Errors in Linux Kernel. In *Proceedings of the 31st ACM Conference on Computer and Communications Security (CCS'24)*, Salt Lake City, UT, USA, October 2024.
- 2 Hengkai Ye, Song Liu, **Zhechang Zhang**, and Hong Hu. VIPER: Spotting Syscall-Guard Variables for Data-Only Attacks. In *Proceedings of the 32nd USENIX Security Symposium (USENIX'23)*, Anaheim, CA, USA, August 2023. [[Link](#)]
- 3 **Zhechang Zhang**, Bin Yuan, Kehan Yang, Deqing Zou, and Hai Jin. StateDiver: Testing Deep Packet Inspection Systems with State-Discrepancy Guidance. In *Proceedings of the 38th Annual Computer Security Applications Conference (ACSAC'22)*, Austin, TX, USA, December 2022. [[Link](#)]

INDUSTRIAL CONFERENCE

- 1 Hengkai Ye, Song Liu, **Zhechang Zhang**, and Hong Hu. One Flip is All It Takes. In *Black Hat Asia Briefings*, Singapore, April 2024. [[Link](#)]

HONORS AND AWARDS

- **2023, 2020 Outstanding Graduates**, Huazhong University of Science and Technology
- **2022, 2018 National Scholarship**, China Ministry of Education (**0.1%**)
- **2022 Champion** in the 17th Challenge Cup Special Contest, China Ministry of Education (**Rank 1/32**)
- **2018 Outstanding Student**, Huazhong University of Science and Technology (**1%**)

COMMUNITY SERVICE

- External Reviewer
Network and Distributed System Security Symposium (NDSS) [2024, 2025]
ACM Conference on Computer and Communications Security (CCS) [2024]
IEEE Transactions on Dependable and Secure Computing (TDSC) [2023]
- Teaching Assistant
Operating System, HUST [Fall 2019]

CVE DISCOVERED

CVE-2021-45098