

# Zhechang Zhang

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

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## EDUCATION

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

## RESEARCH INTEREST

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Software Security, System Security and Fuzzing

## REFEREED CONFERENCE PROCEEDINGS

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- 1 Shuangpeng Bai, **Zhechang Zhang**, and Hong Hu. Countdown: Refcount-guided Fuzzing for Exposing Temporal Memory Errors in Linux Kernel. In *Proceedings of the 31<sup>st</sup> 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 32<sup>nd</sup> 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 38<sup>th</sup> Annual Computer Security Applications Conference (ACSAC'22)*, Austin, TX, USA, December 2022. [\[Link\]](#)

## INDUSTRIAL CONFERENCE

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- 4 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

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

## TEACHING

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- Operating System, Teaching Assistant, Fall 2019, HUST, Wuhan, China

## CVE DISCOVERED

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CVE-2021-45098