Zhechang Zhang

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

zhechang@psu.edu
https://1ncande5cence.github.io/
E338 Westgate Building
University Park, PA, 16802

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 **Zhechang Zhang**, Hengkai Ye, Song Liu and Hong Hu. SACK: Systematic Generation of Function Substitution Attacks Against Control-Flow Integrity. In *Proceedings of the 33rd Annual Network and Distributed System Security Symposium (NDSS'26)*, San Diego, CA, USA, February 2026. [Link]

2 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. [Link]

3 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]

4 **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

- **2026 Spring Travel Award**, IST, The Pennsylvania State University

- **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

  USENIX Security Symposium (USENIX Security) [2025, 2026]

  Network and Distributed System Security Symposium (NDSS) [2024, 2025, 2026]

  ACM Conference on Computer and Communications Security (CCS) [2024, 2025]

  International Conference on Applied Cryptography and Network Security (ACNS) [2026]

  IEEE Transactions on Dependable and Secure Computing (TDSC) [2023]

- Teaching Assistant

  Operating System, HUST [Fall 2019]

CVE Discovered

CVE-2021-45098