

WEI ZHOU

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EDUCATION

08/2016 - 06/2021	University of Chinese Academy of Sciences	Beijing/China
	● PhD. / Information Security	
	● Advisors: Yuqing Zhang	
10/2018 - 10/2020	Pennsylvania State University	State College/USA
	● Visiting Student	
	● Advisors: Peng Liu/Le Guan	
08/2012 - 08/2016	Xidian University	Xi'an/China
	● B.Eng. / Information Security	

RESEARCH INTEREST

My research interests cover a wide range of systems security, including **trusted computing and IoT systems security**. I am especially interested in **developing automatic tools** to detect and exploit **previously unknown vulnerabilities in IoT firmware and platforms**.

PUBLICATIONS

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- [1] **Wei Zhou**, Le Guan, Peng Liu, Yuqing Zhang. Automatic Firmware Emulation through Invalidity-guided Knowledge Inference. **USENIX Security 2021 (CCF A)**.
 - [2] **W. Zhou**, Y. Jia, Y. Yao, et al. Discovering and Understanding the Security Hazards in the Interactions between IoT Devices, Mobile Apps, and Clouds on Smart Home Platforms. **USENIX Security, 2019 (CCF A)**
 - [3] **Wei Zhou**, Yan Jia, Anni Peng, Yuqing Zhang, and Peng Liu. "The effect of iot new features on security and privacy: New threats, existing solutions, and challenges yet to be solved." IEEE Internet of Things Journal 6, no. 2 (2018): 1606-1616. (**ESI highly cited paper**, Times cited from Google Scholar: 180)
 - [4] **Wei Zhou**, et al. Reviewing IoT Security via Logic Bugs in IoT Platforms and Systems. IEEE Internet of Things Journal 2021. (Accept) (SCI IF:11.7)
 - [5] Yao Yao, **Wei Zhou**, Yan Jia, Lipeng Zhu, Yuqing Zhang and Peng Liu. Identifying Privilege Separation Vulnerabilities in IoT Firmware with Symbolic Execution. ESORICS, 2019 (CCF B)

- [6] **Wei Zhou**, et al. "Good Motive but Bad Design: Why ARM MPU Has Become an Outcast in Embedded Systems." arXiv preprint arXiv:1908.03638 (2019).

HONORS AND AWARDS

- Undergraduate Electronic Design Contest – Information Security Invitation Context 2014
National Second Prize
- International Mathematical Contest in Modeling (MCM) 2015
Honorable Mention
- “Challenge Cup” College Student Curricular Academic Science and Technology Works Competition. 2016
National Second Prize
- National Scholarship (**top 0.2% nationwide**) 2015
- National Cyber-security Scholarship (**only 73 winners nationwide**) 2018
- **Chinese Government Scholarship for Two-year Visiting Study** 2018

Invited Presentations

- 28th Usenix Security Symposium Santa Clara, CA, USA. 2019.8
- The European Symposium on Research in Computer Security Luxembourg. 2019.9

Academic Service

IEEE Internet of Things Journal (Impact Factor 11.7)	Reviewer
ACM Computing Surveys Journal (Impact Factor 9.5)	Reviewer