Weizhao Jin

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EDUCATION

University of Southern California   Aug. 2020 – May 2025(Expected)
Ph.D. in Computer Science

University of Virginia   Aug. 2018 – May 2020
Master of Engineering in Computer Engineering

Zhejiang University   Sep. 2014 – June 2018
Bachelor of Engineering in Electrical Engineering and Automation

EXPERIENCE

Graduate Research Assistant   Aug. 2020 – Present
University of Southern California   *Advisor: Muhammad Naveed and Srivatsan Ravi*

- **Secure Publish-Process-Subscribe IoT System**
  Building a secure Publish-Process-Subscribe IoT system using Yao's Garbled Circuits, Homomorphic Encryption and Proxy Re-Encryption

Student Research Assistant   Oct. 2018 – May 2020
Security Lab, University of Virginia   *Advisor: Yuan Tian*

- **Vulnerabilities of Autonomous Vehicle Sensor Fusion Algorithm**
  Trained adversarial examples against vision recognition module; tested attacks on the sensor fusion algorithm of the autonomous vehicle platform Baidu Apollo
- **Vulnerabilities of Dedicated Short-Range Communication**
  Analyzed existing vulnerabilities in the current version of DSRC protocol for connected vehicles; designed several attacks on DSRC protocol on connected vehicle modules

Student Research Assistant   Oct. 2017 – June 2018
USS Lab, Zhejiang University   *Advisor: Wenyuan Xu and Xiaoyu Ji*

- **Security Research on Multi-factor Verification for Online Accounts**
  Built a SMS sniffing system with USRP and Osmocombb; investigated the online account security vulnerability caused by SMS based multi-factor verification; designed a chain reaction attack mechanism which could possibly compromise most of the online service accounts

PUBLICATIONS

- **Towards Fortifying the Multi-Factor-Based Online Account Ecosystem**
  Weizhao Jin*, Xiaoyu Ji*, Ruiwen He, Zhou Zhuang, Wenyuan Xu, Yuan Tian
  Workshop on Data-Centric Dependability and Security (colocated with the IEEE/IFIP International Conference on Dependable Systems and Networks), 2021

- **Evaluating the Dedicated Short-range Communication for Connected Vehicles against Network Security Attacks**
  Tu Le, Ingy ElSayed-Aly, Weizhao Jin, Seunghan Ryu, Guy Verrier, Tamjid Al Rahat, B. Brian Park, Yuan Tian
  6th International Conference on Vehicle Technology and Intelligent Transport Systems, 2020

- **Poster: Attack the Dedicated Short-Range Communication for Connected Vehicles**
  Tu Le, Ingy ElSayed-Aly, Weizhao Jin, Seunghan Ryu, Guy Verrier, Tamjid Al Rahat, B. Brian Park, Yuan Tian
  40th IEEE Symposium on Security and Privacy, 2019

ACTIVITIES

Volunteer   May 2018
ACM TURC 2018   *Shanghai, China*

- Communicated and coordinated with foreign scholars during the conference; Coordinated participants with check-in related procedures

Intern   July 2015 – Aug. 2015
Overseas Internship Program   *Damietta, Egypt*

- Participated in training volunteers; managed task assignment at local NGO RESALA; assisted RESALA in organizing a Global Village cultural exchange event

Program Coordinator   Oct. 2014 – June 2015

AIESEC Overseas Internship Department   *Hangzhou, China*

- Liaised with overseas internship companies; assisted interns in working visa issues; participated in the coordination of the Youth to Business Hangzhou event

Skills

Languages: Chinese(native), English (proficient), German (European B1)
Technical: Git, Linux, Python, C/C++, MATLAB, Java(can read), JavaScript(can read)