Yunhan (Jack) Jia

1195 Bordeaux Dr, Unit 16725
Baidu USA, Sunnyvale, CA 94089
Tel: (+1) 206-458-9830

Email: jackjia@umich.edu
Homepage: **http://www.jiayunhan.com**
Github: github.com/jiayuunhan

RESEARCH INTERESTS

AI Security; Internet of Things security; Autonomous vehicle security;
I like to approach system security problems through systematic program analysis and design.

EDUCATION

University of Michigan, Ann Arbor 09/2013-04/2018
PhD student in Computer Science and Engineering
- Advisor: Professor **Z. Morley Mao**
- Thesis: Program Analysis based Approaches to Ensure Security and Safety of Emerging Software Platforms

Shanghai Jiaotong University, Shanghai, China 09/2009-06/2013
Bachelor of Engineering in Software Engineering
- Advisor: Professor **Haibo Chen**

WORK EXPERIENCE

Senior Security Scientist 04/02018-present
X-Lab, Baidu USA, US

Threat Research Engineer Intern 05/2017-08/2017
Threat Research Team, Palo Alto Networks, US

Research Intern 06/2015-08/2015
QoE Lab, T-Mobile, US

Research Intern 06/2014-08/2014
QoE Lab, T-Mobile, US

Intern 08/2012-09/2012
CSS Lab, Microsoft APGC

PUBLICATIONS

Shichang Xu, Yunhan Jack Jia, Z. Morley Mao, Subhabrata Sen, Dissecting HAS VOD Services for Cellular: Performance, Root Causes and Best Practices, Proceedings of the 17th Internet Measurement Conference (**IMC**), 2017

Ding Zhao, Yaohui Guo, Yunhan Jack Jia, TrafficNet: An Open Naturalistic Driving Scenario Library, Proceedings of the 20th IEEE International Conference on Intelligent Transportation System Conference (**ITSC**), 2017 [PDF]

Yunhan Jack Jia, Ding Zhao, Qi Alfred Chen, Z. Morley Mao, Towards Secure and Safe Appified Automated Vehicles, Proceedings of the 28th IEEE Intelligent Vehicles Symposium (**IV**), 2017 [PDF]

Yunhan Jack Jia, Qi Alfred Chen, Shiqi Wang, Amir Rahmati, Earlence Fernandes, Z.Morley Mao, Atul Prakash, ContexIoT: Towards Providing Contextual Integrity to Appified IoT Platforms, Proceedings of the 24th Network and Distributed System Security Symposium (**NDSS**),2017 [PDF]

Yunhan Jack Jia, Qi Alfred Chen, Yikai Lin, Chao Kong, Z.Morley Mao, Open Port for Bob and Mallory: Open Port Usage in Android Apps and Security Implications, Proceedings of the 2nd IEEE European Symposium on Security and Privacy (**EuroS&P**),2017 [PDF]

Yuru Shao, Jason Ott, Yunhan Jack Jia, Zhiyun Qian, and Z. Morley Mao, The Misuse of Android Unix Domain Sockets and Security Implications, Proceedings of the 23th ACM Conference on Computer and Communications Security (**CCS**),2016 [PDF]

Yunhan Jack Jia, Qi Alfred Chen, Z. Morley Mao, Jie Hui, Kranthi Sontineni, Alex Yoon, Samson Kwong, and Kevin Lau, Performance Characterization and Call Reliability Problem Diagnosis for Voice over LTE, Proceedings of the 21th ACM Annual International Conference on Mobile Computing and Networking (**MobiCom**),2015 [PDF]

Qi Alfred Chen, Zhiyun Qian, Yunhan Jack Jia, Yuru Shao, and Z. Morley Mao, Static Detection of Packet Injection Vulnerabilities – A Case for Identifying Attacker-controlled Implicit Information Leaks, Proceedings of the 22nd ACM Conference on Computer and Communications Security (**CCS**), 2015. [PDF]

INVITED TALKS

The Cost of Learning from the Best: How Prior Knowledge Weakens the Security of Deep Neural Networks

- Talk at **Blackhat Aisa**, Singapore, March 2019

Perception Deception: Physical Adversarial Attack Challenges and Tactics for DNN-Based Object Detection

- Talk at **Blackhat Europe**, London, UK, December 2018

From Memory Safety to AI Security

- Tech talk at Usenix Security Symposium (**Security**) BoF session, Baltimore, USA, August 2018

Lessons Learnt from Securing Modern IoT and Autonomous Vehicle Platform

- Tech talk at Palo Alto Networks, Inc. Santa Clara, USA, July 2017

Towards Secure and Safe Appified Automated Vehicles

- 28th IEEE Intelligent Vehicles Symposium (**IV**), Redondo Beach, USA, June 2017

Open Port for Bob and Mallory: Open Port Usage in Android Apps and Security Implications

- 2nd IEEE European Symposium on Security and Privacy (**EuroS&P**), Paris, France, April 2017

ContexIoT: Towards Providing Contextual Integrity to Appified IoT Platforms

- 24th Network and Distributed System Security Symposium (**NDSS**), San Diego, USA, February 2017

SmartPhone, SmartHome, and SmartCar: Lessons Learnt from Securing Modern Appified Platform

- Invited talk at Shanghai Jiaotong University (**SJTU**), Shanghai, China, Janurary 2017

Performance Characterization and Call Reliability Problem Diagnosis for Voice over LTE

- 21st ACM Annual International Conference on Mobile Computing and Networking (**MobiCom**), Paris, France, September 2015

PATENTS

Monitoring Wireless Data Consumption, US Patent No. US20170005989 [Link]

Cross-Layer Link Failure Alerts, US Patent No. US20160065433 [Link]

Pathway-based Data Interruption Detection, US Patent No. US20160277952 [Link]

HONORS & AWARDS

Internet of Things (IoT) Technology Research Award, Google	2016
MobiCom Student Travel Grant	2015
CSE Fellowship, University of Michigan	2014
Rackham Travel Grant, University of Michigan	2014,2015
USENIX Security Student Travel Grant, USENIX Association	2014,2015
Excellent Participation in Research Program of Shanghai Jiao Tong University	2011

COMMUNITY SERVICES

PC member, ACM Workshop on Automotive Cybersecurity (**AutoSec**) 2019.