

# CHAOWEI XIAO

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## RESEARCH INTERESTS

Adversarial Machine learning, Data driven Cyber Security

## EDUCATION

University of Michigan, Ann Arbor, USA 09/2015-present  
PhD student in Computer Science and Engineering.  
- Advisor: Prof. Mingyan Liu.

University of California, Berkeley, USA 10/2017-05/2018  
Visiting Student in Computer Science and Engineering.  
- Advisor : Prof. Dawn Song and Prof. Bo Li

Tsinghua University, Beijing, China 08/2011-07/2015  
B.S. in Computer Software. Advisor: Prof. Yunhao Liu.  
B.S. in Economics, School of Economic and Management.

## HONORS & AWARDS

**Student Travel Award** (ICLR, USENIX Security) 2018  
**Rackham Travel Grant** 2018  
**Best Paper Award** in MobiCom 2014, Maui, Hawaii 2014  
**First Prize** in the 32nd Tsinghua Great Challenge Cup. 2014  
Intel Chinese Outstanding Student Scholarship 2014  
National Innovation and Entrepreneurship Training Program 2013,2014  
Tencent Chinese Outstanding Student Scholarship 2013  
**First Class** Scholarship for Overall Excellence 2014,2013,2012

## CONFERENCE PAPERS

- **Chaowei Xiao**, Ruizhi Deng, Bo Li, Fisher Yu, Jinfeng Yi, Mingyan Liu, Dawn Song.  
*Characterize Adversarial Examples Based on Spatial Consistency Information for Semantic Segmentation.* ECCV 2018.
- **Chaowei Xiao**<sup>\*</sup>, Jun-Yan Zhu<sup>\*</sup>, Bo Li, Warren He, Mingyan Liu, Dawn Song.  
*Spatially Transformed Adversarial Examples.* ICLR 2018.
- **Chaowei Xiao**, Bo Li, Jun-Yan Zhu, Warren He, Mingyan Liu, Dawn Song.  
*Generating Adversarial Examples with Adversarial Networks.* IJCAI 2018.
- **Chaowei Xiao**, Armin Sarabi, Yang Liu, Bo Li, Tudor Dumitra, Mingyan Liu.  
*From Behavior Similarity to Symptom Similarity: Using Community Detection for Early Discovery of Software Exploits.* Usenix Security 18.
- Kevin Eykholt<sup>\*</sup>, Ivan Evtimov<sup>\*</sup>, Earlene Fernandes, Bo Li, Amir Rahmati, **Chaowei Xiao**, Atul Prakash, Tadayoshi Kohno, Dawn Song.  
*Robust Physical-World Attacks on Machine Learning Models.* CVPR 2018.

- **Chaowei Xiao**, Xinlei Pan, Bo Li, Jian Peng, Jia Peng, Mingyan Liu, Dawn Song.  
*Characterizing Vulnerabilities of Deep Reinforcement Learning*. Under submission at NIPS 2018.
- Ruoxi Jia, Bo Li, **Chaowei Xiao**, Mingyan Liu, Dawn Song, Costas Spanos.  
*Differential Privacy via Bootstrapping* . Under submission at NIPS, 18.
- Liang Tong, Bo Li, Chen Hajaj, **Chaowei Xiao**, Yevgeniy Vorobeychik.  
*Hardening Classifiers against Evasion: the Good, the Bad, and the Ugly*. Under submission at CCS,18.
- Aria Rezaei, **Chaowei Xiao**, Bo Li, Jie Gao  
*Protecting Sensitive Hidden Attributes in IoT Data by Generative Adversarial Networks*. Under submission at Sensys,18.
- Armin Sarabi, Ziyun Zhu, **Chaowei Xiao**, Mingyan Liu, Tudor Dumitras.  
*Patch Me If You Can: A Study on the effects of Individual User Behavior on the End-Host Vulnerability State*. Passive and Active Measurement conference (PAM) 2017.
- Chenshu Wu, Zheng Yang, **Chaowei Xiao**, Chaofan Yang, Yunhao Liu and Mingyan Liu.  
*Static Power of Mobile Devices: Self-updating Radio Maps for Wireless Indoor Localization*. IEEE International Conference on Computer Communications (INFOCOM) 2015. (Acceptance Rate: 19% (316/1640))
- Lei Yang, Yekui Chen, Xiangyang Li, **Chaowei Xiao**, Mo Li and Yunhao Liu.  
*Tagoram: Real-time Tracking of Mobile RFID Tags to High Precision Using COTS Devices*. ACM International Conference on Mobile Computing and Networking (MobiCom) 2014. **BEST PAPER AWARD (1/220)**

## JOURNAL PAPER

- Chenshu Wu, Zheng Yang, **Chaowei Xiao**.  
*Automatic Radio Map Adaptation for Indoor Localization using Smartphones*. IEEE Transactions on Mobile Computing (IEEE TMC) 2017.

## WORKSHOP PAPER

- Kevin Eykholt\*, Ivan Evtimov\*, Earlene Fernandes, Bo Li, Amir Rahmati, **Chaowei Xiao**, Atul Prakash, Tadayoshi Kohno, Dawn Song.  
*Robust Physical-World Attacks on Deep Learning Visual Classification*. CV-COPS 2018

## RESEARCH POSITION EXPERIENCE

### Industry

Research intern, IBM Watson Research Lab, New York, USA.	06/2018-08/2018
Research intern, JD.com, Santa Clara, USA.	06/2017-08/2017
Research intern, SENSETIME Inc, Beijing, China.	01/2015-06/2015
Consultant, GUANGZHOU SECURITY INC, Guangzhou, China	05/2015-06/2015

### Academia

Research Intern, Advised by Prof. Dawn Song, Computer Science and Engineering, University of California, Berkeley.	09/2017-present
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Research Assistant, Advised by Prof. Mingyan Liu, Computer Science and Engineering, University of Michigan, Ann Arbor. 08/2015-present  
Research Intern, Advised by Prof. Lionel Ni.M, Computer Science and Engineering, HongKong University of Science and Technology. 07/2014-09/2014  
Research Intern, Advised by Prof. Yunhao Liu, School of Software, Tsinghua University 08/2013-06/2015