

Xianghang Mi

[Email](#), [Homepage](#), [Google Scholar](#)

Research Interests

Network Security, IoT Security, and Cybercrime.

Work Experience

09/2021 – Now: University of Science and Technology of China

Professor
School of Computer Science

01/2021 – 08/2021: University at Buffalo

Tenure-Track Assistant Professor
Department of Computer Science and Engineering

06/2019 – 01/2021: Facebook, Inc

Research Scientist in Security Infrastructure
Distributed and continuous fuzzing platform, abuse detection.

05/2018 – 08/2018: Facebook, Inc

Software engineer intern in Community Integrity
Network entity reputation: understanding, prediction and application.

05/2017 – 07/2017: AT&T Research Lab

Research intern
Automatic onboarding of virtual network functions in cloud platforms
Deploy OpenStack, onboard VNFs and measure bottlenecks during VNF onboarding.

05/2014 – 05/2015: Baidu, Inc

Researcher & Software developer.
Developed the mobile website for Nuomi (Baidu's business-to-team group-buying service).
Engineered user account modules, improved the performance and robustness of the system.

Education

08/2015 – 06/2020: Indiana University, Bloomington IN

Ph.D. Degree, Department of Computer Science
Advisors: Professor XiaoFeng Wang, and Professor Feng Qian
Thesis: Characterizing Emerging Cybersecurity Threats: An Ecosystem Approach.

09/2009 – 06/2013: Beijing Institute of Technology, Beijing, China

B.S. Degree, Department of Software Engineering

GPA: 85 / 100 (3.5 / 4.5)

Thesis: An FTP server and client on Android platform.

HONORS AND AWARDS

2019 3rd Place (3 out of 80) in CSAW Applied Research Competition

2019 NDSS Distinguished Paper Award

Student Travel Grant: ACM CoNEXT 2016, CSAW'19.

2013 Excellent Undergraduate Thesis Award at Beijing Institute of Technology.

2010 National Motivational Scholarship at Beijing Institute of Technology.

PROFESSIONAL SERVICES

Reviewer: IEEE Transaction on Mobile Computing 2018, ACM Transactions on Privacy and Security 2021

External Reviewer: IEEE Security & Privacy 2020, ACM CHI 2020, ACM CCS 2019, IEEE INFOCOM 2019, NDSS 2022/2019/2018, IEEE ICDCS 2017, ACM AsiaCCS 2016, BIGCOM 2016.

Conference and Workshop Program Committee: GenoPri 2020/2021, SKM 2021.

TEACHING

Spring 2021: CSE 489/589 Modern Networking Concepts

Guest Lectures: CSCI P438 (Computer Networks, IU, Fall 2016), CSCI P538 (Advanced Computer Networks, IU, Fall 2016/Fall 2017).

Selected Publications

NDSS'21 Your Mobile Phone is My Proxy: Understanding and Detecting Mobile Proxy Networks

Xianghang Mi, Siyuan Tang, Zhengyi Li, Xiaojing Liao, Feng Qian, Xiaofeng Wang
Network and Distributed System Security Symposium 2021.

Acceptance Rate: 15.2% = 87/573.

Oakland'19, Resident Evil: Understanding Residential IP Proxy as a Dark Service

Xianghang Mi, Xuan Feng, Xiaojing Liao, Baojun Liu, Xiaofeng Wang, Feng Qian, Zhou Li, Sumayah Alrwais, Limin Sun, Ying Liu

IEEE Symposium on Security and Privacy 2019.

Acceptance Rate: 12% = 84/679.

IMC'17, An Empirical Characterization of IFTTT: Ecosystem, Usage, and Perfor-

mance

Xianghang Mi, Feng Qian, Ying Zhang, and Xiaofeng Wang

ACM Internet Measurement Conference 2017, London, UK.

Acceptance Rate: 23.4% = 42/179.

CoNEXT'16, SMig: Stream Migration Extension For HTTP/2

Xianghang Mi, Feng Qian, and XiaoFeng Wang.

International Conference on emerging Networking EXperiments and Technologies 2016, Irvine, CA.

Acceptance Rate: 17.6% = 35/199.

Security'19, Understanding iOS-based Crowdturfing through Hidden UI Analysis

Yeonjoon Lee, Xueqiang Wang, Kwangwuk Lee, Xiaojing Liao, XiaoFeng Wang, Tongxin Li, Xianghang Mi

USENIX Security Symposium (Security), 2019.

Acceptance Rate: 16% = 113/697.

Oakland'19, Dangerous Skills: Understanding and Mitigating Security Risks of Voice-Controlled Third-Party Functions on Virtual Personal Assistant Systems, 3rd Place (3 out of 80) of CSAW'19 Applied Research Competition

Nan Zhang, Xianghang Mi, Xuan Feng, XiaoFeng Wang, Yuan Tian, Feng Qian.

IEEE Symposium on Security and Privacy 2019.

Acceptance Rate: 12% = 84/679.

NDSS'19, Cracking the Wall of Confinement: Understanding and Analyzing Malicious Domain Take-downs, Distinguished Paper Award

Eihal Alowaisheq, Peng Wang, Sumayah A Alrwais, Xiaojing Liao, XiaoFeng Wang, Tasneem Alowaisheq, Xianghang Mi, Siyuan Tang, Baojun Liu

Network and Distributed System Security Symposium 2019, San Diego, CA.

Acceptance Rate: 17% = 89/521.

NDSS'18, Game of Missuggestions: Semantic Analysis of Search-Autocomplete Manipulations

Peng Wang, Xianghang Mi, Xiaojing Liao, XiaoFeng Wang, Kan Yuan, Feng Qian, and Raheem Beyah

Network and Distributed System Security Symposium 2018, San Diego, CA.

Acceptance Rate: 21.5% = 71/331.

Security'17, Picking Up My Tab: Understanding and Mitigating Synchronized Token Lifting and Spending in Mobile Payment

Xiaolong Bai, Zhe Zhou, XiaoFeng Wang, Zhou Li, Xianghang Mi, Nan Zhang, Tongxin Li, S. Hu, Kehuan, Zhang

USENIX Security Symposium 2017, VANCOUVER, BC, CANADA.

Acceptance Rate: 16.3% = 85/522.

**Oakland'17, Under the Shadow of Sunshine: Understanding and Detecting Bul-
letProof Hosting on Legitimate Service Provider Networks**

*Sumayah Alrwais, Xiaojing Liao, **Xianghang Mi**, Peng Wang, XiaoFeng Wang, Feng
Qian, Raheem Beyah, Damon McCoy*

IEEE Symposium on Security and Privacy 2017, San Jose, CA.

Acceptance Rate: 13% = 60/457.

**arXiv'17, Understanding IoT Security Through the Data Crystal Ball: Where We
Are Now and Where We Are Going to Be**

*Nan Zhang, Soteris Demetriou, **Xianghang Mi**, Wenrui Diao, Kan Yuan, Peiyuan Zong,
Feng Qian, XiaoFeng Wang, Kai Chen, Yuan Tian, Carl A Gunter, Kehuan Zhang, Patrick
Tague, Yue-Hsun Lin*

arXiv preprint, 2017.