

Title:

IoT Research through the lens of Security and Privacy

Abstract:

Internet of Things (IoT) is an emerging paradigm that involves a network of smart objects containing embedded technologies to collect, communicate, sense, and interact with their internal states or the external environment. These schemes and network infrastructures create new business scientific and government applications or services.

The new device-connected world will see a massive exchange of sensitive information through cloud and other wireless means. While IoT promises huge benefits to individuals and businesses, it also brings some additional security and privacy concerns. In IoT, it takes a turn to focus on device theft, device manipulation, identity theft, eavesdropping, etc. to wreak havoc.

This workshop aims at providing such forum for researchers, practitioners and developers from different background areas such as IoT, big data, networking, wireless communication, information security and privacy protection, to exchange the latest experience, research ideas and synergic research and development related to security and privacy issues in IoT environments.

Scope and Topics:

The objective of this workshop is to invite authors to submit original manuscripts that demonstrate and explore current advances in all aspects of security, privacy and trust in IoT systems. The workshop solicits novel papers on a broad range of topics, including but not limited to:

- ✧ Innovative techniques for IoT infrastructure security
- ✧ Internet of Things (IoT) devices and protocols security
- ✧ Security and privacy frameworks for IoT-based frameworks
- ✧ Secure network architecture for IoT
- ✧ Encryption, identity management and intrusion detection for IoT
- ✧ Security related hardware and software in IoT
- ✧ Authentication and access control in IoT
- ✧ Data processing and privacy in IoT
- ✧ Threat intelligence for IoT
- ✧ Lightweight security and cryptographical technology for IoT
- ✧ Security, privacy and trust in IoT Big data

Program Committee Chairs:

Jinsong Han, Xi'an Jiaotong University, China

hanjinsong@gmail.com

<http://gr.xjtu.edu.cn/web/hanjinsong>

Jinsong Han received his Ph.D. degree from Hong Kong University of Science and Technology. He is currently a professor in Department of Computer Science and Technology at Xi'an Jiaotong University. His research interests include: Wireless Network, Mobile Computing, RFID, Smart Sensing and Privacy and Security. Prof. Han is the chief author of "Device-Free Object Tracking Using Passive Tags" (Springer International Publishing) and "Anonymous and Trustworthy Computing in Peer-to-Peer Systems" (LAMBERT Academic Publishing). He won the Hong Kong ICT Awards - Best Innovation & Research Award in 2011. His publications achieve 1100 plus citations according to Google Scholar, He is a senior member of ACM and IEEE, and a member of CCF, and has served on the technical program committees for several IEEE/ACM conferences on IoT, RFID and wireless security.

Chen Qian, University of California Santa Cruz, USA

cqian12@ucsc.edu

<https://users.soe.ucsc.edu/~qian/>

Chen Qian received his B.S. degree from Department of Computer Science, Nanjing University in 2006, an M.S. degree from Department of Computer Science and Engineering at Hong Kong University of Science and Technology in 2008, and the Ph.D. degree in computer science from University of Texas at Austin in 2013. He is currently services as an assistant professor in the Department of Computer Engineering at University of California Santa Cruz. His research interests include IoT, fog & cloud computing, SDN, security & privacy, RFID and mobile computing and funded \$250,000 by NSF on research of IoT. His publications achieve 900 plus citations according to Google Scholar. He has served on the technical program committees for several IEEE/ACM conferences on wireless networking and security.

Wenyuan Xu, Zhejiang University, China

wyxu@zju.edu.cn

<https://cse.sc.edu/~wyxu/>

Wenyuan Xu received her B.S. degree in electrical engineering with the highest honour from Zhejiang University in 1998, an M.S. degree in computer science and engineering from Zhejiang University in 2001, and the Ph.D. degree in electrical and computer engineering from Rutgers University in 2007. She is currently a professor in the College of Electrical Engineering, Zhejiang University. Her research interests include wireless networking, network security and privacy. Prof. Xu is a co-author of the book Securing Emerging Wireless Systems: Lower-layer Approaches, Springer, 2009. Her publications achieve 4100 plus citations according to Google Scholar. She received the NSF Career Award in 2009. She is a member of the ACM and IEEE, and has served on the technical program committees for several IEEE/ACM conferences on wireless networking and security.

Program Committee (tentative) :

Han Ding, Xi'an Jiaotong University, China

Wan Du, University of California, Merced, USA

Wei Gong, Simon Fraser University, Canada

Xiaoyu Ji, Zhejiang University, China

Zhiping Jiang, Xidian University, China

Rui Li, Xidian University, China

Feng Lin, University of Colorado Denver, USA

Li Lu, University of Electronic Science and Technology of China, China

Longfei Shangguan, Princeton University, USA

Peijian Wang, Xi'an Jiaotong University, China

Fu Xiao, Nanjing University of Posts and Telecommunications, China

Lei Xie, Nanjing University, China

Tianzhang Xing, Northwest University, China

Wenyao Xu, University at Buffalo, the State University of New York, USA

Panlong Yang, University of Science and Technology of China, China

Fan Zhang, Zhejiang University, China

Yanchao Zhao, Nanjing University of Aeronautics and Astronautics, China

Xiaolong Zheng, Tsinghua University, China

Yajin Zhou, City University of Hong Kong, China HK

Yongbin Zhou, Chinese Academy of Sciences, China

Hongzi Zhu, Shanghai Jiaotong University, China

Ting Zhu, University of Maryland, Baltimore, USA