

Xinyan Zhou

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Advisor: Wenyan Xu

EDUCATION

- **Zhejiang University (Advisor: Wenyan Xu)** Hangzhou, China
Ph.D., College of Electrical Engineering – Control Theory and Control Engineering Sep. 2014 – Jun. 2019
- **University of Michigan (Advisor: Kevin Fu)** Ann Arbor, Michigan, USA
Visiting Scholar, Electrical Engineering and Computer Science Oct. 2018 – Mar. 2019
- **Zhejiang University** Hangzhou, China
B.E., College of Electrical Engineering Sep. 2010 – Jun. 2014

RESEARCH INTERESTS

- **IoT Security**
 - **Sensing Security:** Security and privacy for sensors, which include accelerometer, gyroscope, microphone, magnetometer, thermocouples.
 - **Secure Device Authentictaion:** Reliable communication channel for IoT devices and mobile devices.
- **Wireless Sensor Network (WSN)**
 - **Sensor Network Deploement:** Design a WSN for extreme environment, e.g., intertidal area.
 - **Quality of Service (QoS):** Low-power design for embedded devices; compressive-sensing-based routing protocols; delay optimization for WSNs.

PUBLICATIONS

- **Xinyan Zhou**, Xiaoyu Ji, Chen Yan, Jiangyi Deng, Wenyan Xu, NAuth: Secure Face-to-Face Device Authentication via Nonlinearity, in proceeding of INFOCOM 2019 (CCF A)
- **Xinyan Zhou**, Xiaoyu Ji, Bin Wang, Yushi Cheng, Francis Choi, Brain Helmuth, Wenyan Xu. Pido: Predictive Delay Optimization for Intertidal Wireless Sensor Networks. *Sensors* 2018, 18, 1464. (SCI, IF=2.677)
- **Xinyan Zhou**, Xiaoyu Ji, Yi-chao Chen, Xiaopeng Li, Wenyan Xu. LESS: Link Estimation with Sparse Sampling in Intertidal WSNs. *Sensors* 2018, 18, 747. (SCI, IF=2.677)
- **Xinyan Zhou**, Yushi Cheng, Xiaoyu Ji, Wenyan Xu, SADO: State-Associated and Delay-Oriented Data Collection for Intertidal WSNs, WCSP 2017. (EI)
- Chaohao Li, Xiaoyu Ji , **Xinyan Zhou**, Juchuan Zhang, Jing Tian, Yanmiao Zhang, Wenyan Xu. HlcAuth: Key-free and Secure Communications via Home-Limited Channel. ACM Asia Conference on Computer and Communications Security, 2018. (EI)
- Zhuoran Ma, **Xinyan Zhou**, Ouyang Xuan, Xiaoyu Ji and Wenyan Xu. A Robust Backup Routing Protocol for Neighbor Area Network in the Smart Grid, WCSP 2017. (EI)
- Xiaohan Lai, Xiaoyu Ji, **Xinyan Zhou**, Longdao Chen. Energy Efficient Link-delay Aware Routing in Wireless Sensor Networks[J]. *IEEE Sensors Journal*, 2017, PP(99):1-1. (SCI, IF = 2.512)
- Yushi Cheng, Xiaoyu Ji , **Xinyan Zhou** and Wenyan Xu, HomeSpy: Inferring User Presence via Encrypted Traffic of Home Surveillance Camera, ICPADS 2017. (EI)
- Yushi Cheng, Xiaoyu Ji , Wenyan Xu and **Xinyan Zhou**. User Presence Inference via Encrypted Traffic of Wireless Camera in Smart Homes, Security and Communication Networks. (SCI)
- Peixiang Zheng, Bin Chen, Xin Lu and **Xinyan Zhou**, Privacy-utility Trade-off for Smart Meter Data Considering Tracing Household Power Usage, ITNEC 2017. (EI)

- Xiaoyu Ji , **Xinyan Zhou**, Miao Xu, Wenyuan Xu, Yabo Dong, OPCIO: Optimizing Power Consumption for Embedded Devices via GPIO Configuration (ACM TOSN, under review)
- Xiaoyu Ji, Chaohao Li, **Xinyan Zhou**, Juchuan Zhang, Jing Tian, Yanmiao Zhang, Wenyuan Xu, Authenticating Smart Home Devices via Home Limited Channels (IEEE Internet of Things Journal, under review)

AWARDS

- **Inventronics Scholarship** *2017 – 2018*
- **Outstanding Student of Zhejiang University** *2017 – 2018*
- **Sifang Automation Scholarship** *2014 – 2015*
- **Outstanding Academic Scholarship** *2014 – 2015*
- **Social Work of Scholarship** *2010 – 2011, 2011 – 2012*
- **Excellent Student Cadre** *2010 – 2011, 2011 – 2012*

EXPERIENCE

- **York University** York, UK
Communication, culture and department introduction programme. *Jan. 2014 – Feb. 2014*
- **Future Scientific City** Nanjing, China
Summer Seminar on Topics of Future Network *Jul. 2014 – Aug. 2014*
- **State Grid Information & Telecommunication Branch** Wenzhou, China
Internship *Jun. 2017 – Aug. 2017*