

Yan (Mia) Zhang

✉ yanzhangyz@asu.edu ☎ 480-859-2794 🏠 <https://www.yanzhangyz.com/>
School of Electrical, Computer and Energy Engineering
Arizona State University, Tempe, Arizona, 85287

EDUCATION

Arizona State University, Tempe, Arizona 08/2017–present
Ph.D. in Computer Engineering (expected), School of Electrical, Computer and Energy Engineering
Beijing Normal University, Beijing, China 09/2014–06/2017
M.S. in Communication and Information System, School of Information Science and Technology
Xi'an Jiaotong University, Xi'an, China 09/2010–07/2014
B.S. in Information & Computing Science, School of Mathematics & Statistics

PROFESSIONAL EXPERIENCE

Arizona State University, Tempe, Arizona 08/2017–present
Research Assistant, School of Electrical, Computer and Energy Engineering
Beijing Normal University, Beijing, China 08/2014–05/2017
Research Assistant, School of Electrical, Computer and Energy Engineering

RESEARCH INTERESTS

Cybersecurity and privacy issues in mobile & networked systems, Internet-of-Things, AI/ML-powered wireless & mobile systems, emerging wireless networks, mobile sensing, dynamic spectrum sharing, mobile crowdsourcing, cyber-physical systems, etc.

PUBLICATIONS

1. **Yan Zhang**, Dianqi Han, Ang Li, Lili Zhang, Tao Li, and Yanchao Zhang, "MagAuth: secure and usable two-factor authentication with magnetic wrist wearables," *IEEE Transactions on Mobile Computing*, DOI: 10.1109/TMC.2021.3072598, April 2021. (17 pages)
2. **Yan Zhang**, Ang Li, Jiawei Li, Dianqi Han, Tao Li, Rui Zhang, and Yanchao Zhang, "SpecKriging: GNN-based secure cooperative spectrum sensing," *IEEE Transactions on Wireless Communications*, accepted for publication, 2022. (12 pages)
3. **Yan Zhang**, Dianqi Han, Ang Li, Jiawei Li, Tao Li, and Yanchao Zhang, "SmartMagnet: proximity-based access control for IoT devices with smartphones and magnets," *IEEE Transactions on Mobile Computing*, DOI: 10.1109/TMC.2022.3149746, February 2022. (12 pages)
4. **Yan Zhang**, Ang Li, Jiawei Li, and Yanchao Zhang, "GNN-based simultaneous localization of multiple wireless intruders," under preparation for submission.
4. Ang Li, Jiawei Li, Dianqi Han, **Yan Zhang**, Tao Li, and Yanchao Zhang, "WearRF-CLA: continuous location authentication with wrist wearables and UHF RFID," *ACM ASIA Conference on Computer and Communications Security (AsiaCCS)*, May 2022. (12 pages, acceptance rate: 18.4%)
5. Jiawei Li, Ang Li, Dianqi Han, **Yan Zhang**, Tao Li, and Yanchao Zhang, "RCID: fingerprinting passive RFID tags via wideband backscatter," *IEEE International Conference on Computer Communications (INFOCOM)*, May 2022. (10 pages, acceptance rate: 19.9%)

6. Dianqi Han, Ang Li, **Yan Zhang**, Jiawei Li, Tao Li, and Yanchao Zhang, "DroneKey: a drone-aided group-key generation scheme for large-scale IoT networks," *ACM Conference on Computer and Communications Security (CCS)*, November 2021. (14 pages, acceptance rate: 22.3%)
7. Dianqi Han, Ang Li, Lili Zhang, **Yan Zhang**, Jiawei Li, Tao Li, Ting Zhu, and Yanchao Zhang, "Deep learning-guided jamming for cross-technology wireless networks: attack and defense," *IEEE/ACM Transactions on Networking*, DOI: 10.1109/TNET.2021.3082839, October 2021. (11 pages)
8. Dianqi Han, Ang Li, Tao Li, Lili Zhang, **Yan Zhang**, Jiawei Li, Rui Zhang, and Yanchao Zhang, "(In)secure acoustic mobile authentication," *IEEE Transactions on Mobile Computing*, DOI: 10.1109/TMC.2021.3053282, January 2021. (15 pages)
9. Tao Li, Dianqi Han, Jiawei Li, Ang Li, **Yan Zhang**, Rui Zhang, and Yanchao Zhang, "Your home is insecure: practical attacks on wireless home alarm systems," *IEEE International Conference on Computer Communications (INFOCOM)*, May 2021. (10 pages, acceptance rate: 19.9%)
10. Jiawei Li, Chuyu Wang, Ang Li, Dianqi Han, **Yan Zhang**, Jinhang Zuo, Rui Zhang, Lei Xie, and Yanchao Zhang, "RF-Rhythm: secure and usable two-factor RFID authentication," *IEEE International Conference on Computer Communications (INFOCOM)*, July 2020. (10 pages, acceptance rate: 19.8%)
11. Lili Zhang, Dianqi Han, Ang Li, Tao Li, **Yan Zhang**, and Yanchao Zhang, "WristUnlock: secure and usable smartphone unlocking with wrist wearables," *IEEE International Conference on Communications and Network Security (CNS)*, June 2019. (9 pages, acceptance rate: 28%)
12. Ang Li, Tao Li, **Yan Zhang**, Lili Zhang, and Yanchao Zhang, "SocialDistance: how far are you from verified users in online social media," *IEEE/ACM International Symposium on Quality of Service (IWQoS)*, June 2019. (10 pages, acceptance rate: 27.4%)
13. Jing Wang, **Yan Zhang**, Hui Hui, and Ningbo Zhang, "QoS-aware proportional fair energy-efficient resource allocation with imperfect CSI in downlink OFDMA systems," *IEEE International Symposium on Personal, Indoor and Mobile Radio Communications (PIMRC)*, August 2015. (5 pages, acceptance rate: 42.5%)
14. Jing Wang, and **Yan Zhang**, "Outage performance of MIMO cooperative networks with selective OFDMA relaying," *Electronics Letters*, vol. 52, no. 20, pp. 1731–1733, 2016. (2 pages)

PROFESSIONAL ACTIVITIES

- **Conference Reviewer for**
 - ACM WiSec 2020
 - IEEE ICDCS 2020
 - EAI SecureComm 2020.
 - IEEE VTC 2016
- **Student member of IEEE**