SHEN LEMING

CONTACT INFORMATION

Department:	Department of Computing	E-mail:	leming.shen@connect.polyu.hk
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Research Interest: Wireless Sensing, IoT Applications & AI, IoT Security, Mobile Computing

Address: QT 404, Chow Yei Ching Building, The Hong Kong Polytechnic University, Hong Kong SAR, China.

EDUCATION & RESEARCH EXPERIENCE

The Hong Kong Polytechnic University   *2022.08 - Present*
Supervisor: Prof. Yuanqing Zheng
2nd-year, Doctor of Philosophy
Department of Computing

Zhejiang University   *2018.08 - 2022.06*
Supervisor: Prof. Jinsong Han
4-year, Bachelor's Degree   Overall GPA: 3.77/4.0
College of Computer Science and Technology, School of Cyber Science and Technology

PUBLICATIONS

Conferences

1. [**MobiSys'24**] **Leming Shen**, Qiang Yang, Kaiyan Cui, Yuanqing Zheng, Xiaoyong Wei, Jianwei Liu, and Jinsong Han. *FedConv: A Learning-on-Model Paradigm for Heterogeneous Federated Clients*. In Proceedings of the ACM International Conference on Mobile Systems, Applications, and Services, MobiSys, June 3-7, Tokyo, Japan.

2. [**INFOCOM'24**] Kaiyan Cui, **Leming Shen**, Yuanqing Zheng, Fu Xiao, Jinsong Han. *Talk2Radar: Talking to mmWave Radars via Smartphone Speaker*. In Proceedings of the IEEE International Conference on Computer Communications, INFOCOM, May 20–23, 2024, Vancouver, Canada.

3. [**SenSys'22**] Ming Gao, Lingfeng Zhang, **Leming Shen**, Xiang Zou, Jinsong Han, Feng Lin, and Kui Ren. *KITE: Exploring the practical threat from acoustic transduction attacks on inertial sensors*. In Proceedings of the 20th ACM Conference on Embedded Networked Sensor Systems, SenSys '22, page 696–709, New York, NY, USA, 2023. Association for Computing Machinery.

4. [**ICDCS'21**] Jianwei Liu, Wenfan Song, **Leming Shen**, Jinsong Han, Xian Xu, Kui Ren, *MandiPass: Secure and Usable User Authentication via Earphone IMU*. 41st IEEE International Conference on Distributed Computing Systems, ICDCS 2021, Washington DC, USA, July 7-10, 2021, 674–684. https://doi.org/10.1109/ICDCS51616.2021.00070

Journals

1. [**TMC'23**] Ming Gao, Lingfeng Zhang, **Leming Shen**, Xiang Zou, Jinsong Han, Feng Lin, Kui Ren, *Exploring Practical Acoustic Transduction Attacks on Inertial Sensors in MDOF Systems*. IEEE Transactions on Mobile Computing, pages 1–18, 2023.1. doi: 10.1109/TMC.2023.3277287.

2. [**TMC'22**] Jianwei Liu, Wenfan Song, **Leming Shen**, Jinsong Han, Kui Ren, *Secure User Verification and Continuous Authentication via Earphone IMU*. 41st IEEE Transactions on Mobile Computing, TMC 2022, Washington DC, USA, July 7-10, 2021, 674–684. https://doi.org/10.1109/TMC.2022.3193847

Others

1. [**ICDCS'23**] **Leming Shen**, Yuanqing Zheng, *PhD Symposium: FedDM: Data and Model Heterogeneity-Aware Federated Learning via Dynamic Weight Sharing*. 43st IEEE International Conference on Distributed Computing Systems, ICDCS 2023, Hong Kong, China, July 18-21, 2023.

2. [**SenSys'22**] Kaiyan Cui, Qiang Yang, **Leming Shen**, Yuanqing Zheng, and Jinsong Han. *Poster Abstract: Integrated sensing and communication between daily devices and mmwave radars*. In Proceedings of the 20th ACM Conference on Embedded Networked Sensor Systems, SenSys '22, page 831–832, New York, NY, USA, 2023. Association for Computing Machinery.

PROFESSIONAL SERVICES

- Program committee of MobiSys 2024 Artifact Evaluation.
- Invited reviewer of IEEE Transactions on Mobile Computing (TMC) 2024.
- Invited reviewer of ACM Transactions on Senosr Networks (ToSN) 2024.
- Invited reviewer of IEEE Transactions on Wireless Communications (TWC) 2023, 2024.
- Invited reviewer of ACM IMWUT/UbiComp 2023, 2024.

TEACHING

- Teaching Assistant, COMP5311 Internet Infrastructure And Protocols, 2022 Fall, 2023 Fall.
- Teaching Assistant, COMP1011 Programming Fundamentals, 2023 Spring, 2024 Spring.

HONORS & AWARDS

1. ACM MobiSys **Distinguished Artifact Evaluation Reviewer Award**, 2024.
2. ACM MobiSys Student Travel Grant, 2024
3. **Outstanding Graduates of Zhejiang University**, awarded on Undergraduate period, 2022.
4. **Excellent Undergraduate Graduation Thesis of Zhejiang University**, *Research and Implementation of Meta-learning-based Wi-Fi Activity Recognition System*, 2022
5. **Microsoft Learn Student Ambassadors**, presented by Microsoft, 2022.
6. **Successful Participant** in Interdisciplinary Contest in Modeling, 2021.
7. **Microsoft Student Partners**, presented by Microsoft, 2021.
8. **Successful Participant** in Interdisciplinary Contest in Modeling, 2020.
9. **Second Prize**, Network Technology Challenges, China College Computing Contest, 2020.
10. **First Prize**, east China division, Network Technology Challenges, China College Computing Contest, 2020.
11. **Successful Participant**, National College Students Network Security Knowledge Competition, 2020.
12. **Microsoft Student Partners**, presented by Microsoft, 2020.