

Shiming Yu

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Working Experience

The Hong Kong Polytechnic University

Jan 2026 – Now

Postdoctoral Fellow (Advisor: Prof. Yuanqing Zheng)

Education

The Hong Kong Polytechnic University

Aug 2022 – Jan 2026

Ph.D. in Computer Science (Advisor: Prof. Yuanqing Zheng)

University of Electronic Science and Technology of China

Aug 2018 – Jul 2022

B.E. in Communication Engineering (GPA: 3.8/4.0)

Research Interest

AIoT, Wireless Networking

Publications

First-author papers:

[**MobiSys'25**] “Are LoRa Logical Channels Really Orthogonal? Practically Orthogonalizing Massive Logical Channels”, Shiming Yu, Ziyue Zhang, Xianjin Xia, Yuanqing Zheng, Jiliang Wang, The 23rd ACM International Conference on Mobile Systems, Applications, and Services, Anaheim, CA, USA, 2025

[**MobiCom'24**] “Revolutionizing LoRa Gateway with XGate: Scalable Concurrent Transmission across Massive Logical Channels”, Shiming Yu, Xianjin Xia, Ningning Hou, Yuanqing Zheng, Tao Gu, The 30th Annual International Conference on Mobile Computing and Networking, Washington D.C., USA, 2024

[**SenSys'24**] “FDLoRa: Tackling Downlink-Uplink Asymmetry with Full-duplex LoRa Gateways”, Shiming Yu, Xianjin Xia, Ziyue Zhang, Ningning Hou, Yuanqing Zheng, The 22nd ACM Conference on Embedded Networked Sensor Systems, Hangzhou, China, 2024

[**TMC'25**] “Resolving Inter-Logical Channel Interference for Large-scale LoRa Deployments”, Shiming Yu, Ziyue Zhang, Xianjin Xia, Yuanqing Zheng, Jiliang Wang, IEEE Transactions on Mobile Computing, 2025

[**TMC'25**] “FDLoRa: Scaling Downlink Concurrent Transmissions with Full-duplex LoRa Gateways”, Shiming Yu, Xianjin Xia, Ziyue Zhang, Ningning Hou, Yuanqing Zheng, IEEE Transactions on Mobile Computing, 2025

[**TON'25**] “XGate: Scaling LoRa Communications to Massive Logical Channels”, Shiming Yu, Xianjin Xia, Ningning Hou, Yuanqing Zheng, Tao Gu, IEEE Transactions on Networking, 2025

Other papers:

[**ICNP'25**] “SlideLoRa: Reliable Channel Activity Monitoring across Massive Logical Channels in LoRa Networks”, Jiamin Jiang, Shiming Yu, Hao Wang, Haiyang Li, Yuanqing Zheng, Lu Wang, The 33rd IEEE International Conference on Network Protocols, Seoul, South Korea, 2025

[**MobiCom'25**] “From Interference Mitigation to Toleration: Pathway to Practical Spatial Reuse in LPWANs”, Ruonan Li, Ziyue Zhang, Xianjin Xia, Ningning Hou, Wenchang Chai, Shiming Yu, Yuanqing Zheng, Tao Gu, The 31st Annual International Conference on Mobile Computing and Networking, Hong Kong, China, 2025

[**SenSys'25**] “MoLoRa: Intelligent Mobile Antenna System for Enhanced LoRa Reception in Urban Environments”, Ningning Hou, Yifeng Wang, Xianjin Xia, Shiming Yu, Yuanqing Zheng, Tao Gu, The 23rd ACM Conference on Embedded Networked Sensor Systems, Irvine, CA, USA, 2025

Professional Services

Organizing Committee

- Publicity Co-Chair, ACM/IEEE Symposium on Edge Computing (SEC)

2026

Technical Program Committee

- WASA, AutoSys Workshop @ MobiSys 2026
- MobiCom Demo, MobiCom AE, MobiSys AE 2025
- MobiCom AE, MobiSys AE 2024

Journal Reviewer

- IEEE Transactions on Mobile Computing 2025
- ACM Transactions on Sensor Networks 2023-26
- IEEE Transactions on Wireless Communications 2023
- IEEE Internet of Things Journal 2024-25
- Computer Networks 2023

Awards

- Distinguished Reviewer Board, ACM TOSN 2026-27
- Winner (Rank #1) @ Three Minute Thesis (3MT) Competition, PolyU FCMS 2025
- Student Travel Grant, ACM MobiCom 2024
- Best Oral Presentation Award @ CRSC, PolyU COMP 2024
- Full Ph.D. Scholarship, PolyU 2022-26
- Outstanding Student Scholarship (Top 15%), UESTC 2020
- National Encouragement Scholarship, UESTC 2019
- Outstanding Student Scholarship (Top 15%), UESTC 2019