

Luca Jiang-Tao Yu

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EDUCATION

- Ph.D. Candidate**, The University of Hong Kong Sep. 2023 – Jul. 2027 (exp)
Hong Kong; Advisors: Prof. Chenshu Wu
- B.Eng.**, Beijing University of Posts and Telecommunications Sep. 2019 – Jul. 2023
Beijing, China; Grade: 3.88/4, Rank: 2/192

RESEARCH EXPERIENCE

- Research Assistant**, Tsinghua University & Shanghai Qi Zhi Institute Nov. 2021 – Sep. 2023
Beijing & Shanghai, China; Advisor: Prof. Hang Zhao
- Research Intern**, Beijing University of Posts and Telecommunications Jun. 2020 – Sep. 2021
Beijing, China; Advisor: Prof. Anfu Zhou

PUBLICATIONS

1. **Luca Jiang-Tao Yu**, Chenshu Wu, “RF-LEGO: Modularized Signal Processing–Deep Learning Co-Design for RF Sensing via Deep Unrolling,” *Proceedings of the 32nd ACM Annual International Conference on Mobile Computing and Networking (MobiCom)*, Austin, TX, USA, 2026.
2. **Luca Jiang-Tao Yu***, Running Zhao*, Sijie Ji, Edith C.H. Ngai, Chenshu Wu, “USpeech: Ultrasound-Enhanced Speech with Minimal Human Effort via Cross-Modal Synthesis,” *Proceedings of the ACM on Interactive, Mobile, Wearable and Ubiquitous Technologies (IMWUT/UbiComp)*, Espoo, Finland, 2025.
3. Weiyang Hou, **Luca Jiang-Tao Yu**, Chenshu Wu, “‘Take Me Home, Wi-Fi Drone’: A Drone-Based Wireless System for Wilderness Search and Rescue,” *Proceedings of the 32nd ACM Annual International Conference on Mobile Computing and Networking (MobiCom)*, Austin, TX, USA, 2026.
4. Running Zhao*, **Luca Jiang-Tao Yu***, Hang Zhao, Edith C.H. Ngai, “Radio2Text: Streaming Speech Recognition using mmWave Radio Signals,” *Proceedings of the ACM on Interactive, Mobile, Wearable and Ubiquitous Technologies (IMWUT/UbiComp)*, Cancun, Mexico, 2023.
5. Running Zhao, **Luca Jiang-Tao Yu**, Tingle Li, Hang Zhao, Edith C.H. Ngai, “Radio2Speech: High Quality Speech Recovery from Radio Frequency Signals,” *Proceedings of Interspeech*, Incheon, South Korea, 2022.
6. Running Zhao, **Luca Jiang-Tao Yu**, Tingle Li, Zhihan Jiang, Chenwei Zhang, Chenshu Wu, Hang Zhao, Edith C.H. Ngai, “SPACE: Speaker Adaptation for Acoustic Eavesdropping using mmWave Radar,” *IEEE Transactions on Mobile Computing*.
7. Dongsheng Yuan*, Xie Zhang*, Weiyang Hou, Sheng Lyu, Yuemin Yu, **Luca Jiang-Tao Yu**, Chengxiao Li, Chenshu Wu, “OctoNet: A Large-Scale Multi-Modal Dataset for Human Activity Understanding Grounded in Motion-Captured 3D Pose Labels,” *Proceedings of the 39th Conference on Neural Information Processing Systems (NeurIPS)*, San Diego, CA, USA, 2025.
8. **Luca Jiang-Tao Yu**, Chenshu Wu, “NeuroDet: Unfolding Target Detection with State Space Model,” Pre-print, 2024.

(* denotes equal contribution.)

ACADEMIC SERVICE

PC Member: IEEE ICPADS (2024, 2025)

Reviewer: ACM IMWUT/UbiComp (Feb. 2024, Nov. 2024, Feb. 2025, May. 2025, Feb. 2026), ACM CHI 2026, ACM TIOT, IEEE JSAS, IEEE VTM

AE Committee: ACM MobiCom 2026, ACM MobiSys 2023, USENIX ATC 2023, USENIX OSDI 2023

TA: COMP1117 – Computer Programming (Fall 2023), COMP7310 – Artificial Intelligence of Things (Spring 2025), COMP3230 – Principles of Operating Systems (Fall 2025)

AWARDS

ACM MobiSys 2026 Travel Grant Award	May. 2026
IEEE 2025 Signal Processing Society Scholarship	Sep. 2025
IEEE 2024 Signal Processing Society Scholarship	Oct. 2024
HKU Postgraduate Scholarship	Sep. 2022
National Scholarship (Rank: 0.7%)	Dec. 2021
China Mobile Outstanding Student Scholarship (Rank: 1%)	Dec. 2021

REFERENCES

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