

Luca Jiang-Tao Yu

CONTACT INFORMATION

Address: Room 101M, Haking Wong Building, The University of Hong Kong
Pokfulam, Hong Kong
Hong Kong
E-mail: lucayu@connect.hku.hk
Homepage: www.lucayu.me

EDUCATION

Ph.D. in Computer Science Sept '23 - Present
Dept. of Computer Science
The University of Hong Kong, Hong Kong
Advisor: Prof. Chenshu Wu
B.Eng. in Information Engineering Sept '19 - Jul '23
School of Info. & Comm. Engineering
Beijing University of Posts and Telecommunications, China
GPA: 3.88/4, Rank: 2/203

RESEARCH INTERESTS

- signal processing & machine learning co-design
- acoustic sensing applications
- mmWave radar sensing applications

EXPERIENCE

Research Assistant Nov '21 - Sept '23
MARS Lab, Advisor: Prof. Hang Zhao
IIIS, Tsinghua University (Beijing) & Shanghai Qi Zhi Institute (Shanghai)

- Research on wireless perception, multi-modality/sensor machine learning.
- Developed an acoustic sensing system via mmWave radar to eavesdrop.

Research Intern Jun '20 - Sept '21
Intelligent Comm. Software & Multimedia Key Lab, Advisor: Prof. Anfu Zhou
School of Computer Science, BUPT (Beijing)

- Research on mmWave radar tracking & sensing.
- Developed a plan of double-hand tracking clustering via mmWave radar.

PUBLICATIONS

- **Luca Jiang-Tao Yu***, Running Zhao*, Sijie Ji, Edith C.H. Nagi, Chenshu Wu. USpeech: Ultrasound-Enhanced Speech with Minimal Human Effort via Cross-Modal Synthesis. Pre-print.
- **Luca Jiang-Tao Yu**, Chenshu Wu. Unfolding Target Detection with State Space Mode. Pre-print.
- Running Zhao, **Jiang-Tao Yu**, Tingle Li, Edith C.H. Ngai[†], Hang Zhao[†]. Radio2Speech: High Quality Speech Recovery from Radio Frequency Signals. **Accepted** by *Interspeech 2022*.
- Running Zhao*, **Jiang-Tao Yu***, Hang Zhao[†], Edith C.H. Ngai[†]. Radio2Text: Streaming Speech Recognition using mmWave Radio Signals. **Accepted** by *Ubi-comp/ISWC 2023*.

HONORS & SCHOLARSHIP

- IEEE Signal Processing Society Scholarship
- HKU Student Postgraduate Scholarship
- National Scholarship (Rank: 7/902, 0.7%)
- China Mobile Outstanding Student Scholarship (Rank: 2/192, 1%)

**ACADEMIC
SERVICE**

- 1st prize in National Math. Competition for College Students (Eng)
- Reviewer: MobiSys '23, ATC '23, OSDI '23;
- TA: COMP1117 (Computer Programming, '23 Spring), COMP7310 (Artificial Intelligence of Things, '24 Spring)
- PC Member: ICPADS '24