

# HONGYAO LIU

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## EDUCATION

**City University of Hong Kong**  
**Ph.D. of Science in Computer Science**  
Supervisor: Prof. Jun Huang

Aug. 2023 – Dec.2027 (Expected)  
Hong Kong, SAR

**Beijing University of Posts and Telecommunications**  
**Bachelor of communication engineering**

Sep. 2018 – Jun. 2022  
Beijing, China

## SELECTED PUBLICATIONS

[MobiCom 2024] **Neuralite: Enabling Wireless High-Resolution Brain-Computer Interfaces**

Full Paper, CCF-A **Hongyao Liu, Junyi Wang, Liuqun Zhai, Yuguang Fang, Jun Huang.**

[HotMobile] **Neuron-Aware Brain-to-Computer Communication for Wireless Intracortical BCI**

Full Paper **Hongyao Liu, Junyi Wang, Xi Chen, Jun Huang.**

[Micromachine] **Switchable and Dual-Tunable Multilayered Terahertz Absorber Based on Patterned Graphene and Vanadium Dioxide**

Full Paper **Hongyao Liu, Panpan Wang, Jiali Wu, Xin Yan, Xueguang Yuan, Yangan Zhang, Xia Zhang.**

[Electronics] **Analysis of terahertz wave on increasing radar cross section of 3D conductive model**

Full Paper **Hongyao Liu, Panpan Wang, Jiali Wu, Xin Yan, Yangan Zhang, Xia Zhang.**

## RESEARCH INTERESTS

My research focuses on

- (1) AIoT: Designing efficient network streaming algorithms for on-device AI and multimodal sensing applications;
- (2) BCI: Architecting wireless streaming frameworks for high-fidelity brain-computer interfaces;
- (3) On-device LLM: Accelerating edge LLM inference via collaborative wireless streaming and efficient computing.

## RESEARCH Project

- 32-Channel wireless iBCI/ECoG headstage with adaptive ADC sample rate

## SELECTED AWARDS

Research Tuition Scholarship, City University of Hong Kong (CityUHK) 2024-2025

Second-Class Scholarship, Beijing University of Posts and Telecommunications 2021