

Yikun Wang

M.Phil. Researcher · Electrical and Computer Engineering

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The University of Hong Kong

EDUCATION

The University of Hong Kong

2024–2026

M.Phil. in Electrical and Computer Engineering

Advisor: Prof. Yik-Chung Wu · GPA: 4.3 / 4.3

Beihang University

2020–2024

B.E. in Electronic Information Engineering

GPA: 3.6 / 4.0 · Academic Scholarships (2021, 2022) · Competition Scholarship (2022)

RESEARCH INTERESTS

Learning-based optimization, wireless communications, 3D Gaussian Splatting, low-altitude 3D reconstruction, reinforcement learning, and robotic motion planning.

RESEARCH EXPERIENCE

Visiting Research Assistant

2024.12–2026.04

Great Bay University & Shenzhen Research Institute of Big Data

Advisor: Prof. Yang Li. Research on cell-free network design, learning-based combinatorial optimization, and vector-quantized CSI compression and precoding.

PUBLICATIONS & PATENT

1.

Y. Wang, Y. Wan, W. Zuo, S. Wang, Y.-C. Wu, C. Xu, and H. Arslan, "LAGS: Low-Altitude Gaussian Splatting with Groupwise Heterogeneous Graph Learning," IEEE Transactions on Vehicular Technology, accepted, 2026. arXiv

2.

Y. Wang, Y. Li, Y.-C. Wu, and R. Zhang, "A General Deep Learning Framework for Wireless Resource Allocation under Discrete Constraints," under review at IEEE TWC, 2026. arXiv

3.

Y. Wang, Y. Li, Z. Ren, J. Lei, Y.-C. Wu, and R. Zhang, "Learning to Jointly Optimize Antenna Positioning and Beamforming for Movable Antenna-Aided Systems," IEEE ICC, 2026. arXiv

4.

"Downlink Beamforming in Cell-Free Systems with Compressed CSI: A Vector Quantized Learning Approach," under review at IEEE GLOBECOM, 2026.

5.

C. Zhang, W. Zuo, B. Cheng, Y. Wang, W.-B. Kou, Y.-C. Wu, and N. Wong, "NTK-Guided Implicit Neural Teaching," CVPR, 2026.

6.

W. Zuo, C. Li, Y. Wang, B. Cheng, Z. Ren, S. Wang, D. W. K. Ng, and Y.-C. Wu, "HPTune: Hierarchical Proactive Tuning for Collision-Free Model Predictive Control," IEEE ICASSP, 2026. arXiv

7.

W. Zuo, C. Li, B. Cheng, Y. Wang, et al., "DPNet: Doppler LiDAR Motion Planning for Highly-Dynamic Environments," IEEE RA-L, 2026. arXiv

8.

"Efficient Transceiver Design for Aerial Image Transmission and Large-scale Scene Reconstruction," accepted by IEEE ISIT Workshop, 2026.

9.

王艺堃, "一种无蜂窝系统的联合授权与波束赋形方法及其相关设备", 国家发明专利, 申请号: 202610309500.6, 申请日期: 2026年3月13日。

TECHNICAL SKILLS

Python, MATLAB, C, Verilog, PyTorch, graph neural networks, reinforcement learning.

LANGUAGES

Chinese (native), English (TOEFL iBT 102).

LEADERSHIP & ACTIVITIES

Former Party branch secretary of the Beihang Student Choir, vice president of the Beihang A Cappella Club, and founder of the Beihang Alumni Vocal Ensemble. Organized concerts and performances, arranged a cappella works, and participated in award-winning Beijing collegiate arts showcases.