

Zeyu Hao

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Summary & Statement

I have rich experience and strong skills in wireless communications and the corresponding application of matrix algebra, optimization theory, and probability theory.

Education

University of Science and Technology of China (USTC), Hefei, China

M.S., Information and Communication Engineering, (expc.) 2025

GPA: 3.23/4.3

Ranking: Not Available Temporarily

One paper in submission to IEEE Transactions on Communications (TCom).

Accessible in ArXiv: <https://arxiv.org/abs/2403.16353>

University of Science and Technology of China (USTC), Hefei, China

B.S., Electronic and Information Engineering, 2022

GPA: 3.46/4.3, Weighted Average: 84.83/100, Arithmetic Average: 85.28/100

Ranking: 47/131

Area of Interest

Wireless Communications, Physical Layer

1. Multi-functional systems: Integrated Sensing and Communications (ISAC), Simultaneous Wireless Power Transfer and Communications (SWIPT), Integrated sensing, communications, and powering (ISCAP)
2. Hybrid beamforming and MIMO technology
3. Energy-efficient beamforming design
4. Antenna Selection

Optimization theory and methods

1. Convex and non-convex optimization
2. Low-complexity optimization methods

Statistical learning theory and its application

Distinction

Graduate Academic Scholarship - First Prize (Master's)	2023
Graduate Academic Scholarship - First Prize (Master's)	2022

Academic Service

Reviewing for

WS29 IEEE ICC 2024 10th Workshop on Integrated Sensing and Communications for 6G
 Integrating Sensing and Comm for Ubiq 2024 Q1, IEEE Internet of Things Magazine
 2023 International Conference on Wireless Communications and Signal Processing (WCSP)

Academic Visits

The Chinese University of Hong Kong, Shenzhen (CUHK-Shenzhen), China	2022
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Academic Cooperation

The Chinese University of Hong Kong, Shenzhen (CUHK-Shenzhen), China	Since 2022
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Project Experiences

Energy-efficient resource allocation based on practical constraints	Huawei
Theory and Method of Ultra Low Energy Consumption Mobile Communication for the "Carbon Peaking and Carbon Neutrality" Strategy	China National Key R&D Program Key Special Projects

Patents

Invention Patents

A Base station system and the power consumption optimization method, device, and equipment used for the base station system, Patent number: 202410044939.1	In preparation for announcement
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Publication

Refereed Journal Articles

1. Zeyu Hao, Yuan Fang, Xianghao Yu, Jie Xu, Ling Qiu, Lexi Xu, and Shuguang Cui, "Energy-Efficient Hybrid Beamforming with Dynamic On-off Control for Integrated Sensing, Communications, and Powering", in submission to IEEE Transactions on Communications (TCom)
 Accessible in ArXiv: <https://arxiv.org/abs/2403.16353>

Refereed Conference Articles

2. In Progress, on the energy-efficient design of Massive MIMO.

Language

Native Chinese (Mandarin & Northeastern Dialect — Hometown: Harbin)

Fluent English, Having got a score of 99 in TOEFL in 2021, and new test not taken yet.

Reference

Dr. Jie Xu

xujie@cuhk.edu.cn

Associate Professor (Tenured) with the School of Science and Engineering, The Chinese University of Hong Kong, Shenzhen (CUHK-Shenzhen), China

Jie Xu's IEEE Author Homepage: <https://ieeexplore.ieee.org/author/37070344700>

Dr. Ling Qiu

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Professor with the Department of Electronic and Engineering and Information Science, University of Science and Technology of China (USTC)

Ling Qiu's IEEE Author Homepage: <https://ieeexplore.ieee.org/author/37279946000>

Dr. Xianghao Yu

alex.yu@cityu.edu.hk

Assistant Professor with the Department of Electrical Engineering, City University of Hong Kong (CityU), Hong Kong

Xianghao Yu's IEEE Author Homepage: <https://ieeexplore.ieee.org/author/37085608777>

Dr. Shuguang Cui

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IEEE Fellow, X.Q. Deng Presidential Chair Professor, the Executive Dean for the School of Science and Engineering at CUHK, Shenzhen, the Executive Vice Director at Shenzhen Research Institute of Big Data, and the Director for Future Network of Intelligence Institute (FNii), The Chinese University of Hong Kong, Shenzhen (CUHK-Shenzhen), China

Shuguang Cui's IEEE Author Homepage: <https://ieeexplore.ieee.org/author/37267838900>