Zichao Xiao

School of Information and Communication Engineering Dalian University of Technology Dalian, Liaoning 116024, China \diamond Tel: (+86)13398352628 \diamond Email: xiaozichao@mail.dlut.edu.cn

EDUCATION

M.S.

Major: Information and Communication Engineering Dalian University of Technology, Dalian, China GPA: 90.45/100 Sept. 2021 - Present Expected Graduate Date: June 2024

B.S.

Major: Electronic and Information Engineering Dalian University of Technology, Dalian, China Outstanding Graduate, GPA: 88.90/100, Ranking: 6/186 Sept. 2017 - June 2021

ENGLISH LANGUAGE PROFICIENCY

• IEITS: Overall mark 7.0 (listening 7.0 reading 8.5 writing 6.5 speaking 5.5)

RESEARCH AREAS

- Precoding design
- Integrated sensing and communications
- Radar target estimation
- MIMO-OFDM
- Signal processing in physical layer wireless communications

SERVICE TO SCIENTIFIC COMMUNITY

• Reviewer for IEEE Transactions on Signal Processing, IEEE Transactions on Communications, IEEE Transactions on Vehicular Technology, IEEE Wireless Communications Letters, and IEEE Global Communications Conference.

AWARDS

- 2022 Special Scholarship of Faculty Electronic Information and Electrical Engineering (19/550)
- 2022 Outstanding Graduate Student
- 2021 National Scholarship of Graduate Student (12/550)
- 2020 National Encouragement Scholarship of Undergraduate Student
- 2019 National Encouragement Scholarship of Undergraduate Student
- 2018 National Encouragement Scholarship of Undergraduate Student
- 2018 Excellence Academic Scholarship (First Class)

Journals

- Z. Xiao, R. Liu, M. Li, Y. Liu, and Q. Liu, "Low-complexity designs of symbol-level precoding for MU-MISO systems," *IEEE Trans. Commun.*, vol. 70, no. 7, pp. 4624-4639, Jul. 2022. https://arxiv.org/pdf/2205.00891.pdf
- Z. Xiao, R. Liu, M. Li, and Q. Liu, "A novel joint angle-range-velocity estimation method for MIMO-OFDM ISAC systems," submitted to *IEEE Trans. Signal Process.*, under review. https://arxiv.org/pdf/2308.03387.pdf
- Z. Xiao, R. Liu, M. Li, W. Wang, and Q. Liu, "Sparsity exploitation via joint receive processing and transmit beamforming design for MIMO-OFDM ISAC systems," submitted to *IEEE Trans. Commun.*, under review. https://arxiv.org/pdf/2312.17454.pdf

Conferences

- Z. Xiao, R. Liu, M. Li, Y. Liu, and Q. Liu, "Joint beamforming design in DFRC systems for wideband sensing and OFDM communications," in *Proc. IEEE Global Commun. Conf. (GLOBECOM)*, Rio, Brazil, Dec. 2022, pp. 1631-1636. https://ieeexplore.ieee.org/document/10001164
- Z. Xiao, R. Liu, Y. Liu, M. Li, and Q. Liu, "Low-complexity grouped symbol-level precoding for MU-MISO systems," in *Proc. IEEE Global Commun. Conf. (GLOBECOM)*, Madrid, Spain, Dec. 2021, pp. 1-6.

https://ieeexplore.ieee.org/document/9685319

- P. Li, Z. Xiao, M. Li, R. Liu, and Q. Liu, "Low-range-sidelobe waveform design for MIMO-OFDM ISAC systems," submitted to *Proc. IEEE Int. Conf. Commun. (ICC)*, under review. https://arxiv.org/pdf/2305.18847.pdf
- P. Jiang, R. Liu, M. Li, **Z. Xiao**, and Q. Liu, "Deep learning for SLP-based ISAC waveform design," submitted to *Proc. IEEE Int. Conf. Commun. (ICC)*, under review. (pdf file can be provided)

OTHER ACADEMIC EXPERIENCES

- Major participant (1/5) in writing the lab internal study handbook for new people to MIMO
- Making an introductory slide on "Typical Optimization Problems & Algorithmic Methods" (pdf file can be provided)
- Major participant (2/6) and key idea provider in applying for one National Natural Science Foundation of China (successful)