

Education

University of Electronic Science and Technology of China

September 2021 – June 2024

School of Information and Communication Engineering, Master in Science

Major: Information and Communication Engineering

Advisor: Dr. Guolong Cui

Lanzhou University

September 2017 – June 2021

School of Information Science & Engineering, Bachelor in Science

Major: Electronic Information Science and Technology

Advisor: Dr. Kun Zhan

Grade-Point-Average: 3.88/5

Research Experience

Research Assistant

2021 – Present

Radar Complex Environment Sensing Lab, UESTC, Chengdu, China

- with Dr. Guolong Cui
- Target detection in sea clutter; target detection and tracking with mm-wave radar; contrastive learning; weakly supervised learning.

Research Assistant

2019 – 2021

Deep Learning Lab, LZU, Lanzhou, China

- with Dr. Kun Zhan
- Medical image segmentation; image classification.

Team Member

2017 – 2019

Robotics Competition Team, LZU, Lanzhou, China

- with classmates
- Embedded system development; control the smart car.

Publications

Senlin Xia, Yukai Kong, Kui Xiong, and Guolong Cui, “Target detection in sea clutter via contrastive learning,” *IEEE Transactions on Instrumentation and Measurement*, 2023. [[paper](#)] [[code](#)]

Senlin Xia, Kui Xiong, Tao Fan, and Guolong Cui, “Radar target detection in nonhomogeneous sea clutter via weakly supervised learning,” *IEEE Geoscience and Remote Sensing Letters*, 2023. (Minor revision) [[code](#)]

Senlin Xia, Yutao Xiang, Shisheng Guo, and Guolong Cui, “A radar target tracking algorithm based on learning displacement,” *IEEE Geoscience and Remote Sensing Letters*, 2023. (Under review) [[code](#)]

Yukai Kong, **Senlin Xia**, Luxin Dong, Xianxiang Yu, and Guolong Cui, “Compound jamming recognition via contrastive learning for distributed MIMO radars,” *IEEE Transactions on Vehicular Technology*, 2023. (Under review)

Skills

Languages Python \gg C\C++ \approx Matlab
Frameworks Pytorch

Awards

First prize National Undergraduate Engineering Training Integration Ability Competition 2019