

Xiangyu Sun

No.2006, Xiyuan Ave – West Hi-Tech.Zone – Chengdu, P.R.China

☎ +86 15753501193 • ✉ sunx4382@gmail.com

I'm a third-year undergraduate at the University of Electronic Science and Technology of China (UESTC), seeking for *Summer Research Internship* opportunities with an interest on Generalization for Spatial Intelligence.

Education

University of Electronic Science and Technology of China (UESTC)

Chengdu, China

Bachelor of Robotics Engineering

2022-2026

GPA: 3.92/4.00 — Rank: 2/43 (top 5%)

Internships and Research Projects

Undergraduate Researcher: Fairness in Medical Vision-Language Models

HiLab, UESTC

Mentor: Prof. Guotai Wang

05/2024 - Present

○ First-authored paper accepted at ISBI 2025, where we constructed a fully fair dataset that spans multiple sensitive attributes (e.g., gender, age) to conduct a comprehensive fairness analysis of 4 Vision-Language Models (VLMs) under 5 Parameter-Efficient Fine-Tuning (PEFT) methods utilizing a range of fairness evaluation metrics.

○ First-authored paper currently under review for submission to MICCAI 2025, proposing a novel, parameter-efficient fine-tuning method aimed at mitigating biases in VLMs.

Research Intern: Medical Image Computation

NTU, Singapore

Mentor: Dr. Teoh Teik Toe

01/2024

○ Contributed as a third author to a paper on medical imaging, accepted by ICPICS 2024, where we investigated the impact of Squeeze-and-Excitation (SE) attention modules on ResNet variants for chest X-ray classification.

Publications

[1] Fairness Analysis of CLIP-Based Foundation Models for X-ray Image Classification

Xiangyu Sun, Xiaoguang Zou, Yuanquan Wu, Guotai Wang, Shaoting Zhang

Accepted at ISBI, 2025

[2] ResNet Models with SE Attention for Lung Disease Detection

Hanyu Fang, Hao Xu, Xiangyu Sun, Xinyu Zhang, Zhuoyang Yan, Teoh T. Toe

Accepted at ICPICS, 2024

Honors & Scholarships

- 2024 - 2025 | **National Scholarship**, Ministry of Education, PRC
- 2023 - 2025 | **First-Class Scholarship**, UESTC
- 2023 - 2024 | **Outstanding Staff Member**, UESTC Student Union
- 2023 - 2024 | **Second Prize**, Sichuan University Engineering Competition

Research Interest

Computer Vision, Robotics, Vision-Language Models, Generalization

Technical Strengths

- **Programing Languages:** Python (PyTorch, NumPy, Scikit-learn, Pybullets, etc.), C++, \LaTeX , ROS.
- **Expertise:** VLM, Transfer Learning, Generalization, Medical Image Analysis, Robotics, etc.
- **Languages:** Mandarin (native), English (fluent, CET-6: 576/710).
- **Operating Systems:** Linux, Windows.

Courses Undertaken

Artificial Intelligence, Machine Vision, Robotics, Automatic Control Theory, Mechanical Design, Micro Embedded Systems, ROS, Data Structures and Algorithms.