

# Xiangyu Sun

No.2006, Xiyuan Ave – West Hi-Tech.Zone – Chengdu, P.R.China  
☎ +86 15753501193 • ✉ sunx4382@gmail.com • 🌐 mu9enn.github.io

Hi! I'm Xiangyu Sun, a fourth-year undergraduate student in Robotics Engineering at UESTC, and I'm going to pursue a Ph.D. at SJTU in collaboration with Shanghai AI Lab, focusing on AI Agent for Scientific Discovery.

## Education

**University of Electronic Science and Technology of China (UESTC)** Chengdu, China  
Bachelor of Robotics Engineering 2022-2026  
GPA: 3.93 / 4.00 — Rank: 2 / 43 (top 5 %)

## Internships and Research Projects

**Undergraduate Researcher: Fairness, 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 finished and to be submitted, proposing a novel, parameter-efficient fine-tuning method aimed at mitigating biases in VLMs.

**Visiting Student: MLLMs, Vision Question Answering** **MedAILab, Westlake University**  
*Mentor: Prof. Yefeng Zheng* 06/2025 - 08/2025

- Dedicated to studying the unimodal bias problem of medical multimodal large language models (MLLMs) in Vision Question Answering (VQA) tasks.

**Research Intern: Medical Image Analysis** **NTU, Singapore**  
*Mentor: Dr. Teoh Teik Toe* 01/2024

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

## Publications

[1] **FairFT: Fair Fine-tuning of Medical Vision-Language Models Guided by Textual Embedding**  
*Xiangyu Sun, Xiaoguang Zou, Yuanquan Wu, Guotai Wang, Shaoting Zhang* to be submitted

[2] **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

[3] **ResNet Models with SE Attention for Lung Disease Detection**  
*Hanyu Fang, Hao Xu, Xiangyu Sun, Xinyu Zhang, Zhuoyang Yan, Teoh T. Toe* Accepted at ICIPCS 2024

## Honors & Scholarships

- 2024 – 2025 | **Champion of 2025 RAICOM Robot Developer Competition** (🌟 mu9enn/eyes\_piper, 7 stars)
- 2024 - 2025 | **(top 1%) National Scholarship**, Ministry of Education, PRC
- 2023 - 2025 | **(top 1%) First-Class Scholarship**, UESTC
- 2023 - 2024 | **(top 1%) Outstanding Staff Member**, UESTC Student Union

## Research Interest

AI for Science, AI for Healthcare, Multimodal Large Language Models, Vision-Language Models, Explainable AI

## Technical Strengths

- Programing Languages:** Python (PyTorch, NumPy, Scikit-learn, Pybullets, etc.), C++,  $\LaTeX$ , ROS.
- Expertise:** Explainable AI, Robotics, Simulation, Multimodal learning, Transfer Learning, etc.
- Languages:** Mandarin (native), English (fluent, CET-6: 576/710).
- Operating Systems:** Linux, Windows.

## Courses Undertaken

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