# Jie Sun

Phone: +86 15858112982 | Email : sunjie2019@mail.ustc.edu.cn
Graduate Student at University of Science and Technology of China, Hefei, Anhui

## EDUCATION

**University of Science and Technology of China** Sept 2023 - July 2025

- **ME:** School of Data Science
- **Major:** Data Science
- **Advisor:** Xiang Wang

**University of Science and Technology of China** Sept 2019 - July 2023

- **BE:** School of the Gifted Young
- **Major:** Computer Science
- **Course Highlights: Machine Learning (99, Top 1)**, Python Programming Practices (A+, Top 3%), Linear algebra (95, Top 3%), Mathematical analysis (92)
- **Overall GPA:** 3.76/4.3 (Top 15%)

## AWARD AND HONORS

- **Second place** in the second University of Science and Technology of China Quantitative Trading Research Competition. USTC, 2023
- Outstanding graduates USTC, 2023
- Special Scholarship - DiAo USTC, 2022
- Excellent Student Scholarship – Silver USTC, 2021
- Excellent Student Scholarship – Silver USTC, 2020
- National Physics Contest for Middle School Students - First Price Fuyang High School, 2018
- National Mathematics Contest for Middle School Students - First Price Fuyang High School, 2018
- Pan-Pearl River Delta and Chinese Elite Schools Physics Olympiad - First Price Fuyang High School, 2018

## INTERN EXPERIENCE

**X Asset Management** April 2023 - July 2023
**Quantitative Research Intern**
**Goal:** Search for stock prediction algorithms that exhibit strong generalization performance in the face of out-of-distribution issues.

- Quickly get started with the dataset and achieve a 5% higher annualized backtest performance compared to the baseline on the low-to-medium frequency dataset.
- I possess a comprehensive understanding of data overfitting, underfitting, and model selection.

**Lingjun Invest** July 2023 - Sept 2023
**Quantitative Algorithm Intern**
**Goal:** Mining factors from raw data on high frequency datasets.

- The average daily predicted correlation (IC value) reached 0.2 for the May through June 2023 dataset.

## RESEARCH EXPERIENCES

**Topic: Agents4Auction** Sept 2023 - Now
**Instructor: Prof. Xiang Wang, Dr. Jiancan Wu; LDS, USTC**
**Goal:** Building a bidding simulation environment using LLM-based agents.

- We propose an innovative agent model architecture that can not only accurately simulate auction environments but also demonstrate the intelligent behavior of agents during the simulation process.

**Topic: Generalizable Graph Classification** Sept 2022 - Jan 2023
**Instructor: Prof. Xiang Wang, Dr. Yongduo Sui; LDS, USTC**
**Goal:** Classify the Out-Of-Distribution (OOD) graph data properly.

- A new framework is proposed to mine structural information in the same data class from a global perspective.
- Extensive experiment results on synthetic and real-world data show the efficiency of the proposed framework.

**Topic: Generalizable Graph Classification** Sept 2022 - Feb 2023
**Instructor: Prof. Xiang Wang, Dr. Yongduo Sui; LDS, USTC**
**Goal:** Classify the Out-Of-Distribution (OOD) graph data properly.

- Proposed a new framework that makes the model sensitive to the graph's stable parts and insensitive to the rest.
- The experiment results on synthetic and real-world data indicate that a generalizable model should be sensitive to the stable parts and insensitive to the environmental parts.

## PROJECT WORKS

**Face Fusion** Nov 2022 - Jan 2023
**Instructor: Yang Cao; Course: Computer Vision**

- Extract 68 feature points on the face, and then perform affine transformation and fusion on the corresponding triangles obtained by Delaunay Triangulation.
- Tests on multiple sets of images demonstrate the effectiveness of the method.

**Deep Q-learning** Nov 2021 - Jan 2022
**Instructor: Jie Wang; Course: Machine Learning**

- Implemented the Deep Q-learning algorithm on the game breakout with *torch*.
- The average evaluation result is 400+(almost the highest).

**CarPlate Identity** April 2021 - June 2021
**Instructor: Guangzhong Sun; Course: Programming Practice for Scientific Problems Solving**

- Automatic recognition of license plate information of a car in photos based on cv2.
- The demo can correctly identify different license plates in different background environments.

## TECHNICAL STRENGTHS

- **Hobbies:** I enjoy diving into problems, particularly those related to **mathematics and finance**. I have a strong foundation in mathematics and science, having earned an average score of 90+ in fundamental math courses such as mathematical analysis, linear algebra, probability theory, and stochastic processes, as well as machine learning (Top 1%).
- **Programming Languages:** Python, C++, C, Matlab, LaTeX
- **Languages:** Chinese (native), English (CET6: 467, Speaking: A)