Ziyang Liu

Nationality: Chinese(Han) D.O.B: 25/12/2003

TEL: 13721121001 EMAIL: ziyannn@yeah.net

EDUCATION

Soochow University | School of Future Science and Engineering | Bachelor of Science in Statistics

September 2022 - July 2026

Core Courses: Mathematical Analysis, Advanced Algebra, Applied Multivariate Analysis, Probability Theory and Mathematical Statistics.

GPA: 3.7/4.0 | Top 20% **English Proficiency:** CET-6 Certified **Leadership Roles:** Class Monitor, School Student Union Minister

Joint Program: Tsinghua University - X-Institute | Social Innovation + AI

September 2024 - September 2027

Core Courses: Enhanced Student Research Training, Open Research for Innovation Challenges

Supervisors: Min Tang (Former Senior Advisor to the State Council), Xiaolei Zuo (Chief Executive Advisor of Galaxy Securities)

PROJECT

Soochow University Scientific Research Project: Multimodal Sentiment Analysis (Lead Researcher),

February 2024 - March 2025

Supervisors: Prof. Jin Wang (Vice Dean, Professor) Prof. Min Cao (Associate Professor)

This project focuses on sentiment analysis through the analysis of multimodal data, such as text, video, and audio, aiming to enhance the model's robustness in scenarios where certain modalities are missing.

- ICME 2025: "FSRF: Factorization-guided Semantic Recovery for Incomplete Multimodal Sentiment Analysis" (CCF-B, First Author)
- CVPR 2025: "MCCD: Multi-Agent Collaboration-based Compositional Diffusion for Complex Text-to-Image Generation" (CCF-A, Second Author)
- Pattern Recognition: "Hierarchical Factorization-Guided Self-Distillation for Incomplete Multimodal Sentiment Analysis" (JCR Q1, Under Review)
- Utility Model Patent: "AI-based Portable Glasses" (First Inventor, Granted, Patent No. CN222420684U)
- Invention Patent: "AI-driven Sentiment Analysis System and Method" (First Inventor, Under Substantial Examination, Application No. 2024119020975)

Tsinghua University Scientific Research Project: Multi-Agent Reinforcement Learning (Core Member),

April 2025- June 2025

Supervisors: Prof. Bowen Zhou (Head of Shanghai AI LAB, Professor), Prof. Ning Ding (Assistant Professor)

Focused on the coordination and optimization of multi-agent systems in complex tasks through reinforcement learning.

- Built a multi-agent interaction framework and designed task environments to implement inter-agent coordination mechanisms;
- Applied Test-Time Reinforcement Learning(TTRL)to train policies, significantly improving the generalization capabilities of the system;
- Independently developed and tested code modules, and assisted in theretical analysis and convergence proof of the TTRL mechanism.

Tsinghua University & Xinstitute Joint Training ESRT Program:AI Agent System Research and Implementation for Smart Interaction (Lead Researcher) October 2024 - February 2025

Supervisor: Prof. Haitao Zheng (Associate Professor)

Leveraging WeChat, this project explores the development of intelligent agent systems supporting text and voice interactions, focusing on task automation, workflow design, and multimodal content generation.

Assisted in the development of the WeChat chatbot "Giiso_Wechat" for Hinton AI Agent Company and completed the mid-term review

AWARDS & HONORS

Competitions:

- 2024 National College Student Innovation and Invention Competition: National Third Prize (Team Leader)
- 2024 Huashu Cup China Undergraduate Mathematical Contest in Modeling: First Prize (Undergraduate Group, Team Leader)
- 2024 China Undergraduate Mathematical Contest in Modeling: First Prize, Jiangsu Province (Team Leader)
- 2025 Mathematical Contest in Modeling: Meritorious Winner(Team Leader)

Academic Awards:

- 2023 Soochow University Academic Excellence Scholarship
- 2024 Soochow University Academic Excellence Scholarship

TRAINING & PROGRAM

London South Bank University | Visiting Student | Data Science & AI Project

December 2022 - January 2023

Tsinghua Shenzhen International Graduate School | Research Intern

October 2024 - February 2025

 Assisted in integrating GeWechat with Restful API, building a custom chatbot and successfully linking it to the WeChat platform, supporting both text and voice interactions.

ByteDance | Training Program

February 2025 - April 2025

 Engaged in offline teaching discussions with ByteDance on the topic of "AI + Social Innovation," focusing on the development of an AI-driven agent to assist elderly individuals in writing their memoirs.