Wuzhou Sun

· · https://sunwuzhou03.github.io ·

Personal Summary

I have excellent academic performance at school, am optimistic and upward-looking, responsible at work, have strong self-motivation, love to try new things, and my research areas are **reinforcement learning and its appication**.

Education

The Hong Kong Polytechnic University, Artificial Intelligence and Financial Technology, *Semester Exchange Student* 2023.09 - 2023.12

GPA: 3.57/4.3 (90/100.0), As one of the two autumn exchange students of the university, participated in the semester exchange at The Hong Kong Polytechnic University and received the Double First-Class University Funding Scholarship.

Southwest Jiaotong University, Artificial Intelligence,*Undergraduate* 2021.09 - 2026.07

GPA: 3.60/4.0 (87.91/100.00), Southwest Jiaotong University Comprehensive Scholarship (First Class, Second Class), Merit Student, Outstanding Student Cadre.

Internship Experience

Southwest Jiaotong University, Research Assistant 2024.07 - Present

- **Research on the Application of Reinforcement Learning** Apply reinforcement learning techniques to address issues in game intelligence, large language model reasoning, and other related areas.
- We converted complex evaluation problems into reinforcement learning tasks and improved the PPO algorithm to handle target evaluation and screening with uncertain numbers. This enhanced algorithm enabled us to develop a robust neural network evaluator that integrates multiple attributes for comprehensive assessment without manual data annotation.

Beijing Zhixin Weitong Technology Co., Ltd, AI Department Manager 2024.01 - Present

- **Intelligentization of the Company's Simulation Platform** Based on the company's simulation platform, exploring the feasibility of intelligent decision-making through reinforcement learning and the integration of company business with large models.
- Lead the development of a user-friendly distributed reinforcement learning tool, collaborated on the design and enhancement of simulation platforms to enable the integration of RL algorithms, and established local LLM tools.

The Hong Kong Polytechnic University | AIMS Lab, Visiting Student 2023.07 - 2023.12

- **Evaluating Player Performance and Tactical Decision-Making in Racket Sports Using Deep Reinforcement Learning** This study uses visual techniques to analyze professional badminton matches and builds a dataset. It then trains a Q-value table with Q-learning to assess player performance and inform tactical decisions.
- Developed the first open-source badminton video annotation tool leveraging pose recognition and object detection technologies, significantly reducing the dataset construction time from 2 months to just 1 week, achieving a 83% reduction in time. **project url: https://github.com/sunwuzhou03/SoloShuttlePose**.
- Submitted a paper to ICCA as the third author.

Technical Skills

- **Programming Languages**: Python, SQL, C/C++, Shell.
- **Operating Systems, Databases, and Engineering Tools**: Linux/Git.
- **Languages**: English: CET-4: 578, CET-6: 496; Chinese(native speaker).
- **Other**: LaTeX, Markdown.

Competition Awards

- **Champion (Prize: 200,000 CNY)** of Tencent Enlightenment Artificial Intelligence National Open Competition (https://aiarena.tencent.com/aiarena/zh/), December 2023.

- **Third Prize** of the 14th Blue Bridge Cup Programming Contest (Python Group A) (https://dasai.lanqiao.cn/), April 2023.
- **Silver Award** of the 14th Southwest Jiaotong University ACM Programming Contest, May 2023.
- **Third Prize** of the 2021 Southwest Jiaotong University Rookie Cup Programming Contest, December 2021.

Community Involvement/Other Experience

- Actively participate in open-source community discussions and contribute, Github: https://github.com/sunwuzhou03.
- Writing technical blogs, personal blog: https://sunwuzhou03.github.io/blogs.
- Awarded "Outstanding Class Leader" in Baidu Pinecone Talent Class Elite Program.
- Participated in the RL-China and Multi-agent applications academic conference.