Ruiwen Zhou

skyriver@sjtu.edu.cn github.com/skyriver-2000

Education

Shanghai Jiao Tong University M.S. student in Computer Science (GPA: 3.83 / 4.00) Shanghai Jiao Tong University B.S. in Information Engineering (GPA: 3.90 / 4.30)

Interest

I am now pursuing M.S. degree in Shanghai Jiao Tong University, advised by Prof. Weinan Zhang and Prof. Yong Yu.

My interest lies in building powerful agents that automatically help people to complete complex tasks and inspire creative ideas / designs. To achieve this, recently I focus on:

- Learning from environment feedback with LLMs.
- Retrieval-Augmented Generation with LLMs.
- LLMs + X (music, control, etc.) applications.

Experience

China Pacific Insurance Company

Student Leader of a Collaboration Project

- Proposed a step-wise in-context example retrieval and prompting method to better solve sequential decision making tasks with LLMs, which achieves state-of-the-art performances on various benchmarks.
- One paper in submission.

Amazon Web Service

Research Intern, Shanghai Al Lab

Feb 2022 - Feb 2023 Shanghai, China

- Participated in design and implementation of a novel tabular prediction model based on relevant sample retrieval and graph neural networks, which achieves state-of-the-art performances on various benchmarks.
- One paper accepted at NeurIPS 2022.

Microsoft Research Asia

Research Intern, Machine Learning Group

- Proposed a history-dependent reinforcement learning algorithm (Trajectory Q-Learning), which achieves theoretical optimality and decent practical performance in risk-sensitive policy optimization under distortion risk measures.
- One paper (done in Jan 2023) in submission.

Publications

 TRAD: Enhancing LLM Agents with Step-Wise Thought Retrieval and Aligned Decision R. Zhou, Y. Yang, M. Wen, Y. Wen, W. Wang, C. Xi, G. Xu, Y. Yu, and W. Zhang. Is Risk-Sensitive Reinforcement Learning Properly Resolved? R. Zhou, M. Liu, K. Ren, X. Luo, W. Zhang, and D. Li. 	In submission In submission
Awards	
National Scholarship (Top 1 / 144)	2020
A-Class Excellence Scholarship (Top 1 / 144)	2020
B-Class Excellence Scholarship (Top 10%)	2019, 2021

Sep 2022 - Mar 2025 Shanghai, China Sep 2018 - Jun 2022 Shanghai, China

Feb 2023 - Feb 2024

Shanghai, China

Aug 2021 – Jan 2022

Shanghai, China