Lihe Li

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Research Interests

My research interest is Reinforcement Learning, especially in Multi-agent Reinforcement Learning.

Education

Nanjing University, Nanjing, Jiangsu, China   2023.09 - present
M.Sc. in Computer Science and Technology
Advisor: Prof. Yang Yu

Nanjing University, Nanjing, Jiangsu, China   2019.09 - 2023.07
B.E. in Artificial Intelligence
Advisor: Prof. Yang Yu

Publications (* indicates equal contribution)

[10] **Dynamics Adaptive Safe Reinforcement Learning with a Misspecified Simulator.**
Ruiqi Xue, Ziqian Zhang, Lihe Li, Feng Chen, Yi-Chen Li, Yang Yu, Lei Yuan. In *Joint European Conference on Machine Learning and Principles and Practice of Knowledge Discovery in Databases (ECML PKDD), 2024.*

[9] **Continual Multi-Objective Reinforcement Learning via Reward Model Rehearsal.**
Lihe Li, Ruotong Chen, Ziqian Zhang, Zhichao Wu, Yi-Chen Li, Cong Guan, Yang Yu, Lei Yuan. In *The 33rd International Joint Conference on Artificial Intelligence (IJCAI), 2024.*

[8] **Efficient Human-AI Coordination via Preparatory Language-based Convention**
Cong Guan, Lichao Zhang, Chunpeng Fan, Yi-Chen Li, Feng Chen, Lihe Li, Yunjia Tian, Lei Yuan, Yang Yu. In *The Twelfth International Conference on Learning Representations (ICLR), Workshop on Large Language Model (LLM) Agents, 2024.*

[7] **Cost-aware Offline Safe Meta Reinforcement Learning with Robust In-Distribution Online Task Adaptation.**
Cong Guan, Ruiqi Xue, Ziqian Zhang, Lihe Li, Yi-Chen Li, Lei Yuan, Yang Yu. In *The 23rd International Conference on Autonomous Agents and Multi-Agent Systems (AAMAS), 2024.*

[6] **A Survey of Progress on Cooperative Multi-agent Reinforcement Learning in Open Environment**
Lei Yuan, Ziqian Zhang, Lihe Li, Cong Guan, Yang Yu. Submitted to *Science China Information Sciences (SCIS).*

[5] **Learning to Coordinate with Anyone**
Lei Yuan, Lihe Li, Ziqian Zhang, Feng Chen, Tianyi Zhang, Cong Guan, Yang Yu, Zhi-Hua Zhou. In *The Fifth Distributed Artificial Intelligence Conference (DAI),* **Best Paper Award***, 2023.*

[4] **Fast Teammate Adaptation in the Presence of Sudden Policy Change**
Ziqian Zhang*, Lei Yuan*, Lihe Li, Ke Xue, Chengxing Jia, Cong Guan, Chao Qian, Yang Yu. In *Proceedings of the 39th Conference on Uncertainty in Artificial Intelligence (UAI), 2023.*

[3] **Robust Multi-agent Coordination via Evolutionary Generation of Auxiliary Adversarial Attackers**

Lei Yuan*, Ziqian Zhang*, Ke Xue, Hao Yin, Feng Chen, Cong Guan, Lihe Li, Chao Qian, Yang Yu. In *Proceedings of the 37th AAAI Conference on Artificial Intelligence (AAAI), Oral Presentation, 2023.*

[2] **Robust Multi-agent Communication via Multi-view Message Certification**

Lei Yuan, Tao Jiang, Lihe Li, Feng Chen, Zongzhang Zhang, Yang Yu. In *Science China Information Sciences (SCIS).*

[1] **Multi-agent Continual Coordination via Progressive Task Contextualization**

Lei Yuan, Lihe Li, Ziqian Zhang, Fuxiang Zhang, Cong Guan, Yang Yu. In *IEEE Transactions on Neural Networks and Learning Systems (TNNLS).*

Honors and Awards

Best Paper Award of The Fifth Distributed Artificial Intelligence Conference (DAI 2023)	2023
Outstanding Bachelor's Thesis of Nanjing University	2023
Outstanding Graduate of Nanjing University	2023
The Egret Scholarship	2022
The People's Scholarship	2020, 2021

Skills

- Programming Skills: Python, MATLAB, C/C++, bash, HTML, LaTeX
- Language Skills: Mandarin (native), English (CET4 614, CET6 603), Cantonese (native)