XIHUAI WANG

Phone: (+86) 159 0209 8266 Email: leoxhwang@sjtu.edu.cn

Website: https://xihuai18.github.io Google Scholar Semantic Scholar



RESEARCH INTERESTS

Xihuai's research interests include Reinforcement Learning and Multi-agent System. Specifically, he is now focusing on

- Multi-agent Reinforcement Learning in Cooperative Scenarios;
- Large Language Models for Reinforcement Learning.

EDUCATION

Shanghai Jiao Tong University

Sep. 2020 - present

Doctor of Philosophy in Computer Science and Technology (expected July, 2025)

Advisor: Prof. Weinan Zhang and Prof. Ying Wen

Sun Yat-sen University

Sep. 2016 - July. 2020

Bachelor of Engineering in Computer Science and Technology (GPA Top 1%)

PUBLICATIONS

Order Matters: Agent-by-agent Policy Optimization

Xihuai Wang, Zheng Tian, Ziyu Wan, Ying Wen, Jun Wang, Weinan Zhang

In The Eleventh International Conference on Learning Representations, ICLR 2023.

Model-based Multi-agent Policy Optimization with Adaptive Opponent-wise Rollouts

Zhang Weinan, Wang Xihuai, Shen Jian, Zhou Ming.

Proceedings of the Thirtieth International Joint Conference on Artificial Intelligence, IJCAI 2021.

PREPRINTS

Quantifying Zero-shot Coordination Capability with Behavior Preferring Partners

Xihuai Wang, Shao Zhang, Wenhao Zhang, Wentao Dong, Jingxiao Chen, Ying Wen, and Weinan Zhang.

https://arxiv.org/abs/2310.05208.

Model-based Model-based Multi-agent Reinforcement Learning: Recent Progress and Prospects

Xihuai Wang, Zhicheng Zhang, and Weinan Zhang.

https://arxiv.org/abs/2203.10603.

TALKS

Coordinate Agents vis Policy Optimization

Aug. 8 2023

A tutorial about cooperative multi-agent reinforcement learning at RLChina.

RESEARCH INTERNSHIPS

Shanghai Digital Brain Lab

Apr. 2022 - May. 2023

 $In tern\ Researcher$

Game AI research.

Large Language Models research.

Tencent AI Platform

July. 2020 - Jan. 2021

 $In tern\ Researcher$

Game AI research.

COMPETITIONS

Top 7 in the $2^{\rm nd}$ Tencent Kai Wu Multi-Agent Reinforcement Learning Competition, 2022.

AWARDS & HONORS

Wenjun Wu Honored Ph.D. Class, 2020 - Present.

National Scholarship, 2017 - 2018 Academic Year.

National Scholarship, 2016 - 2017 Academic Year.