Zifan Wu

Curriculum Vitae

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https://zifanwu.github.io/

Education

2021– 2024(expected) **M.Sc. in Computer Science**, *Sun Yat-sen University*.
Supervisor: Chao Yu
Research Interest: reinforcement learning (with emphasis on safety/sample efficiency)

2017–2021 **B.Sc. in Mathematics**, *Sun Yat-sen University*.
Cumulative GPA: 3.8/4.0

Publications

- **Zifan Wu**, Bo Tang*, Qian Lin*, Chao Yu, Shangqin Mao, Qianlong Xie, Xingxing Wang, and Dong Wang, "Off-Policy Primal-Dual Safe Reinforcement Learning", International Conference on Learning Representations (ICLR), 2024.
- Qian Lin, **Zifan Wu***, Bo Tang*, Chao Yu, Shangqin Mao, Qianlong Xie, Xingxing Wang, and Dong Wang, "Safe Offline Reinforcement Learning with Real-Time Budget Constraints", International Conference on Machine Learning (ICML), 2023.
- **Zifan Wu**, Chao Yu, Chen Chen, Jianye Hao, and Hankz Hankui Zhuo, "Models as Agents: Optimizing Multi-Step Predictions of Interactive Local Models in Model-Based Multi-Agent Reinforcement Learning", AAAI Conference on Artificial Intelligence (AAAI), 2023.
- **Zifan Wu**, Chao Yu, Chen Chen, Jianye Hao, and Hankz Hankui Zhuo, "Plan To Predict: Learning an Uncertainty-Foreseeing Model for Model-Based Reinforcement Learning", Neural Information Processing Systems (NeurIPS), 2022.
- **Zifan Wu**, Chao Yu, Deheng Ye, Junge Zhang, Haiyin Piao, and Hankz Hankui Zhuo, "Coordinated Proximal Policy Optimization", Neural Information Processing Systems (NeurIPS), 2021.

Scholarships

2022 **National Scholarship** (Highest scholarship awarded by the Ministry of Education of China, **top 1%**); Graduate University-level First-class Scholarship

2021 Guangda Alumni Scholarship; Graduate University-level Second-class Scholarship

Experience

Meituan Inc. Research intern in Advertising Algorithm Research Group
2022-2023 Project on *Intelligent Auto-bidding Systems*, hosted by Bo Tang&Shangqin Mao

- Successfully applied the two algorithms in the auto-bidding advertising system of the biggest local delivery services company in China
- Proposed the first off-policy primal-dual-based safe RL algorithm that matches the asymptotic performance of on-policy methods in low data regime (accepted by ICLR'2024)
- Proposed an offline safe RL algorithm using the diffusion model for problems with real-time online safety constraints (accepted by ICML'2023)