# Zifan Wu

## Curriculum Vitae

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☐ https://zifanwu.github.io/

### Education

2021–now **Ph.D. in Computing**, University of Utah.

Supervisor: Daniel S. Brown

2021–2024 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)