Wanpeng Zhang

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Intro

I am a Ph.D. candidate in the School of Computer Science at Peking University, advised by Professor Zongqing Lu.
My research interests include: *Reinforcement Learning, Generative Modeling, Multimodal LLMs, and Embodied Agent.*

Education

Peking University **Sep. 2022 – Present**
Ph.D. Candidate, School of Computer Science *Supervisor: Zongqing Lu*

Tsinghua University **Sep. 2019 – Jun. 2022**
Master of Science (M.S.), Department of Computer Science and Technology *Supervisor: Xi Xiao*

Nankai University **Sep. 2015 – Jun. 2019**
Bachelor of Science (B.S.), School of Mathematical Sciences *Advisor: Jishou Ruan*

Experience

Beijing Academy of Artificial Intelligence (BAAI) **May. 2024 – Present**
Research Intern (Multimodal LLMs / Embodied Agent) *Beijing, China*

Tencent AI Lab **Jun. 2020 – Jul. 2021**
Research Intern (Reinforcement Learning / AI for Science) *Shenzhen, China*

Publication

1. **Wanpeng Zhang**, Yilin Li, Boyu Yang, Zongqing Lu. *Tackling Non-Stationarity in Reinforcement Learning via Causal-Origin Representation.* (**ICML 2024**)

2. **Wanpeng Zhang**, Zongqing Lu. *AdaRefiner: Refining Decisions of Language Models with Adaptive Feedback.* (**NAACL 2024**)

3. Ziluo Ding*, **Wanpeng Zhang***, Junpeng Yue, Xiangjun Wang, Tiejun Huang, Zongqing Lu. *Entity Divider with Language Grounding in Multi-Agent Reinforcement Learning.* (**ICML 2023**)

4. Xiaopeng Yu, Jiechuan Jiang, **Wanpeng Zhang**, Haobin Jiang, Zongqing Lu. *Model-Based Opponent Modeling.* (**NeurIPS 2022**)

5. Xiaoyan Cao, Yao Yao, Lanqing Li, **Wanpeng Zhang**, Zhicheng An, Zhong Zhang, Li Xiao, Shihui Guo, Xiaoyu Cao, Meihong Wu, Dijun Luo. *iGrow: A Smart Agriculture Solution to Autonomous Greenhouse Control.* (**AAAI 2022**)

6. Mingzhe Chen, Xi Xiao, **Wanpeng Zhang**, Xiaotian Gao. *Efficient and Stable Information Directed Exploration for Continuous Reinforcement Learning.* (**ICASSP 2022**)

7. **Wanpeng Zhang**, Xiaoyan Cao, Yao Yao, Zhicheng An, Dijun Luo, Xi Xiao. *Robust Model-based Reinforcement Learning for Autonomous Greenhouse Control.* (**ACML 2021**)

8. Yao Yao, Li Xiao, Zhicheng An, **Wanpeng Zhang**, Dijun Luo. *Sample Efficient Reinforcement Learning via Model-Ensemble Exploration and Exploitation.* (**ICRA 2021**)

9. Zhicheng An, Xiaoyan Cao, Yao Yao, **Wanpeng Zhang**, Lanqing Li, Yue Wang, Shihui Guo, Dijun Luo. *A Simulator-based Planning Framework for Optimizing Autonomous Greenhouse Control Strategy.* (**ICAPS 2021**)

10. **Wanpeng Zhang**, Xi Xiao, Yao Yao, Mingzhe Chen, Dijun Luo. *MBDP: A Model-based Approach to Achieve both Robustness and Sample Efficiency via Double Dropout Planning.* (arXiv'21.08)

11. Bowen Zhao, Xi Xiao, **Wanpeng Zhang**, Bin Zhang, Guojun Gan, Shutao Xia. *Self-Paced Probabilistic Principal Component Analysis for Data with Outliers.* (**ICASSP 2020**)

Patent

- **Wanpeng Zhang**, Dijun Luo, Xi Xiao. *Method, device and equipment for determining parameters and storage medium.* (CN112527104A)

Award

- **Presidential Scholarship of Peking University.** (May. 2024)
- **Rhino-bird Elite Training Program of Tencent AI Lab.** (Jul. 2021)
- **Mathematical Contest in Modeling (MCM/ICM), Meritorious Winner (First Prize).** (Apr. 2017)
- **China Undergraduate Mathematical Contest in Modeling (CUMCM), Second Prize.** (Jan. 2016)

Service

Conference Reviewer

- ICML 2022, 2023, 2024
- NeurIPS 2022, 2023, 2024
- ICLR 2024