Yulai Zhao

Homepage Google Scholar DBLP ORCID Semantic Scholar ResearchGate GitHub LinkedIn

yulaiz@princeton.edu

Research Interests

Machine Learning, Reinforcement Learning, general LLMs

Education

Princeton University 2022 - Present

- Ph.D. in Machine Learning, Department of Electrical and Computer Engineering
- Advisors: Jason D. Lee, S. Y. Kung

Tsinghua University 2018 - 2022

- B.Eng. in Electronic Information Science and Technology, Department of Electronic Engineering
- Advisors: Simon S. Du, Hongwei Chen

Research Internships

Megvii (Face++) Research, Beijing, China 2019 - 2020

- Worked as a core contributor in developing the MMDetection3D framework.
- Mentor: Kwan-Yee Lin

Publications

* denotes equal contribution or alphabetical ordering.

1. **Local Optimization Achieves Global Optimality in Multi-Agent Reinforcement Learning**
   Yulai Zhao, Zhuoran Yang, Zhaoran Wang, Jason D. Lee
   In International Conference on Machine Learning (ICML) 2023
2. **Blessing of Class Diversity in Pre-training**
   Yulai Zhao, Jianshu Chen, Simon S. Du
   In International Conference on Artificial Intelligence and Statistics (AISTATS) 2023
   (Oral presentation & notable paper, 2% acceptance rate)
3. **Optimizing the Performative Risk under Weak Convexity Assumptions**
   Yulai Zhao
   In NeurIPS 2022 Workshop on Optimization for Machine Learning
4. **Provably Efficient Policy Gradient Methods for Two-Player Zero-Sum Markov Games**
   Yulai Zhao, Yuandong Tian, Jason D. Lee, Simon S. Du
   In International Conference on Artificial Intelligence and Statistics (AISTATS) 2022

Awards/Honors

International Conference on Artificial Intelligence and Statistics (AISTATS) Notable Paper *2023*

Scholarship of Academic Excellence *2020*
Awarded to Tsinghua students ranking top 5 %.

Scholarship of Academic Excellence *2019*
Awarded to Tsinghua students ranking top 5 %.

Toyota Scholarship *2019*
Awarded to the department's top 3 out of 260+ students.

Top 10 in the *Infinity of Math* Competition *2018*
Awarded to students outperforming 150+ participants in the school-wide calculus contest.

Programming and Computing Skills

- Proficient: Python (NumPy, PyTorch, pandas)
- Intermediate: MATLAB, C/C++, Kdb+