Canzhe Zhao

EDUCATION

Shanghai Jiao Tong University

Ph.D. Student in Computer Science and Engineering

- Advisor: Prof. Shuai Li
- GPA: 3.13/4.0

Shandong University

B.Eng. in Software Engineering

- GPA: 4.73/5.0, ranking: 2/342 (until 2020/06/15)

Henan Experimental High School

High School Student

Research Interests

Learning Theory

I am broadly interested in learning theory, with a particular focus on sequential decision-making problems, including

- Online Learning
- Reinforcement Learning

PUBLICATIONS AND PREPRINTS

- F. Kong, C. Zhao, and S. Li, "Best-of-three-worlds analysis for linear bandits with follow-the-regularized-leader algorithm", in *The Thirty Sixth Annual Conference on Learning Theory*, *COLT 2023, 12-15 July 2023, Bangalore, India*, ser. Proceedings of Machine Learning Research, vol. 195, PMLR, 2023, pp. 657–673.
- [2] Q. Li*, C. Zhao*, T. Yu, J. Wu, and S. Li, "Clustering of conversational bandits with posterior sampling for user preference learning and elicitation", User Modeling and User-Adapted Interaction, pp. 1–48, 2023.
- [3] C. Zhao, R. Yang, B. Wang, and S. Li, "Learning adversarial linear mixture markov decision processes with bandit feedback and unknown transition", in *The Eleventh International Conference on Learning Representations, ICLR 2023, Kigali Rwanda, May 1-5, 2023, 2023.*
- [4] C. Zhao, R. Yang, B. Wang, X. Zhang, and S. Li, "Learning adversarial low-rank markov decision processes with unknown transition and full-information feedback", in *NeurIPS*, 2023.
- [5] C. Zhao, Y. Ze, J. Dong, B. Wang, and S. Li, "Differentially private temporal difference learning with stochastic nonconvex-strongly-concave optimization", in *Proceedings of the Sixteenth ACM International Conference on Web Search and Data Mining, WSDM 2023, Singapore, 27 February 2023 - 3 March* 2023, ACM, 2023, pp. 985–993.
- [6] C. Zhao*, Y. Ze*, J. Dong, B. Wang, and S. Li, "DPMAC: differentially private communication for cooperative multi-agent reinforcement learning", in *Proceedings of the Thirty-Second International Joint Conference on Artificial Intelligence, IJCAI 2023, 19th-25th August 2023, Macao, SAR, China*, ijcai.org, 2023, pp. 4638–4646.

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> Shanghai, China Sept. 2021 - present

Jinan, Shandong Province, China Sept. 2017 - Jun. 2021

Zhengzhou, Henan Province, China Sept. 2014 - Jun. 2017

- [7] C. Chen, C. Zhao, and S. Li, "Simultaneously learning stochastic and adversarial bandits under the position-based model", in *Thirty-Sixth AAAI Conference on Artificial Intelligence*, AAAI 2022, AAAI Press, 2022, pp. 6202–6210.
- [8] C. Zhao, T. Yu, Z. Xie, and S. Li, "Knowledge-aware conversational preference elicitation with bandit feedback", in WWW '22: The ACM Web Conference 2022, Virtual Event, Lyon, France, April 25 - 29, 2022, ACM, 2022, pp. 483–492.
- [9] J. Wu*, C. Zhao*, T. Yu, J. Li, and S. Li, "Clustering of conversational bandits for user preference learning and elicitation", in CIKM '21: The 30th ACM International Conference on Information and Knowledge Management, Virtual Event, Queensland, Australia, November 1 - 5, 2021, ACM, 2021, pp. 2129–2139.
- [10] Z. Xie, T. Yu, C. Zhao, and S. Li, "Comparison-based conversational recommender system with relative bandit feedback", in SIGIR '21: The 44th International ACM SIGIR Conference on Research and Development in Information Retrieval, Virtual Event, Canada, July 11-15, 2021, ACM, 2021, pp. 1400–1409.
- (* indicates equal contribution.)

EXPERIENCE

Academic Services

Reviewer/sub-reviewer

- ICLR 2023, 2024
- $-\,$ NeurIPS 2021, 2022, 2023
- ICML 2021, 2022, 2023
- $-\,$ UAI 2021, 2022, 2023
- AAMAS 2021, 2022
- ALT 2024
- AISTATS 2023
- $-\,$ JSAIT 2021
- TNNLS 2023

Reading Groups

The reading groups I attended mainly focus on reinforcement learning, online learning and optimization.

- Algorithmic Game Theory, 2023
- A Modern Introduction to Online Learning, 2022
- Reinforcement Learning: Theory and Algorithms, 2022
- Large-Scale Optimization for Data Science, 2021
- Bandit Algorithms, 2020

CONTESTS

• Kaggle Santa 2020 - The Candy Cane Contest - Silver Medal (Top 6%)	Jan. 2021
• The 2019 ACM-ICPC Asia Regional Contest - Bronze Medal	Oct. 2019
• The 2019 ACM-ICPC China Shandong Provincial Programming Contest - Silver Medal	May. 2019
• China Undergraduate Mathematical Contest in Modeling - The Second Prize in Shandong Provin	nce Sept. 2018

Honors

• Huatai Securities Scholarship of Shanghai Jiao Tong University	Dec. 2023
• The Third Excellent Doctoral Academic Forum of John Hopcroft Center - The First	Prize Dec. 2022
Huatai Securities Scholarship of Shanghai Jiao Tong University	Dec. 2022
Weichai Power Scholarship of Shandong University	Oct. 2019
• Shandong University Academic Scholarship - The Second Prize	Sept. 2019
• Shandong University Research and Innovation Scholarship - The Second Prize	Sept. 2019
• Shandong University Academic Scholarship - The First Prize	Sept. 2018
• Shandong University Research and Innovation Scholarship - The Second Prize	Sept. 2018
• Shandong University Triple-A Student	Sept. 2018