Zhaolin Gao

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https://zhaolingao.github.io

About I'm a second-year Computer Science Ph.D. student at Cornell University, where I am advised by Thorsten Joachims and Wen Sun. My research includes reinforcement learning, natural language processing, and recommendation systems. My work has been published at NeurIPS, ICLR, CVPR, WWW, SIGIR, RecSys, and INFOCOM.

Education

Cornell University Aug. 2023 ∼ *Present*
- Ph.D., Computer Science

University of Toronto Sep. 2018 ∼ Jun. 2023
- B.A.Sc., Computer Engineering, Minor in Artificial Intelligence
- Overall GPA: 3.95/4.00 (93/100); Technical Course GPA: 4.00/4.00 (95/100)

Experience

Research Scientist Intern, Meta May 2025 ∼ *Present*
- Topics: LLM Reasoning

Graduate Student Researcher, Cornell University Aug. 2023 ∼ *Present*
- Advised by Prof. Thorsten Joachims and Prof. Wen Sun.
- Topics: Reinforcement Learning for Generative Models & Recommendation System

Machine Learning Intern, Layer 6 AI May 2021 ∼ Aug. 2022
- Advised by Dr. Maksims Volkovs.
- Topics: Collaborative Filtering & Natural Language Processing

Research Assistant, University of Toronto Nov. 2021 ∼ Jun. 2022
- Advised by Prof. Scott Sanner.
- Topics: Variational Autoencoder & Recommendation System

Research Assistant, University of Toronto May 2019 ∼ Sep. 2019
- Advised by Prof. Baochun Li.
- Topics: Graph Neural Networks & Few-Shot Learning

Honors and Awards

LinkedIn PhD Award 2024
University Fellowship, Cornell University 2023
W. S. Wilson Medal, University of Toronto 2023
RecSys Challenge 2022, 2nd place (56 teams) 2022
Dean's Honour List, University of Toronto 2018 ∼ 2023
ECE Top Student Award, University of Toronto 2018 ∼ 2020
The Wallberg Undergraduate Scholarship, University of Toronto 2018 ∼ 2020
First Year Research Fellowship, University of Toronto 2019

Academic Activity

Reviewer
- 2025: NeurIPS, KDD, WWW, ICML EXAIT, ICML MoFA
- 2024: TKDE, ICML ARLET, ICML MHFAIA
- 2022: TOIS

Other Part-time content creator with more than 50,000 followers and 10 million views on Bilibili, Douyin, and YouTube. Immature photographer, videographer, and editor.

Publications

J. P. Zhou, K. Wang, J. Chang, **Z. Gao**, N. Kallus, K. Q Weinberger, K. Brantley and W. Sun, *Q♯: Provably Optimal Distributional RL for LLM Post-Training,* preprint.

Z. Gao, W. Zhan, J. D. Chang, G. Swamy, K. Brantley, J. D. Lee and W. Sun, *Regressing the Relative Future: Efficient Policy Optimization for Multi-turn RLHF,* in Proceedings of International Conference on Learning Representations, 2025.

Z. Gao, J. Zhou, Y. Dai and T. Joachims, *End-to-end Training for Recommendation with Language-based User Profiles,* in Workshop on Risks, Opportunities, and Evaluation of Generative Models in Recommender Systems at RecSys'24.

Z. Gao, J. D. Chang, W. Zhan, O. Oertell, G. Swamy, K. Brantley, T. Joachims, J. A. Bagnell, J. D. Lee and W. Sun, *REBEL: Reinforcement Learning via Regressing Relative Rewards,* in Proceedings of the Advances in Neural Information Processing Systems, 2024.

Z. Gao, K. Brantley and T. Joachims, *Reviewer2: Optimizing Review Generation Through Prompt Generation,* arXiv preprint arXiv:2402.10886, 2024.

Y. Lu, **Z. Gao***, Z. Cheng*, J. Sun*, B. Brown, G. Yu, A. Wong, F. Pérez and M. Volkovs, *Session-based Recommendation with Transformer,* in Proceedings of the Recommender Systems Challenge 2022 (RecSys 2022), Seattle, USA, Sep. 18-23, 2022.

Z. Gao, T. Shen, Z. Mai, M. R. Bouadjenek, I. Waller, A. Anderson, R. Bodkin and S. Sanner, *Mitigating the Filter Bubble while Maintaining Relevance: Targeted Diversification with VAE-based Recommender Systems,* in Proceedings of the 45th International ACM SIGIR Conference on Research and Development in Information Retrieval (SIGIR 2022), Madrid, Spain, July 11-15, 2022.

Z. Gao*, Z. Cheng*, F. Pérez, J. Sun and M. Volkovs, *MCL: Mixed-Centric Loss for Collaborative Filtering,* in the Proceedings of the ACM Web Conference 2022 (WWW 2022), April 25-29, 2022.

W. Lin, **Z. Gao** and B. Li, *Shoestring: Graph-Based Semi-Supervised Classification With Severely Limited Labeled Data,* in the Proceedings of the 2020 IEEE Conference on Computer Vision and Pattern Recognition (CVPR 2020), pp. 4174-4182, Seattle, Washington, June 16-18, 2020.

W. Lin, **Z. Gao** and B. Li, *Guardian: Evaluating Trust in Online Social Networks with Graph Convolutional Networks,* in the Proceedings of IEEE INFOCOM, pp. 914-923, Virtual Conference, July 6-9, 2020.