Zhaolin Gao

CONTACT
zg292@cornell.edu
https://zhaolingao.github.io

EDUCATION

Cornell University Aug. 2023 – Present
- ▷ Ph.D. in Computer Science (GPA: 4.09/4.00)
- ▷ Thesis Committee: Thorsten Joachims, Wen Sun, Claire Cardie
- ▷ Publications: Google Scholar

University of Toronto Sep. 2018 – Jun. 2023
- ▷ B.A.Sc. in Computer Engineering (GPA: 3.95/4.00)

RESEARCH EXPERIENCE

Cornell Tech, New York, NY Aug. 2025 – Present

Cornell University, Ithaca, NY Aug. 2023 – Aug. 2025
Graduate Student Researcher
Collaborating with Prof. Thorsten Joachims and Wen Sun on LLM post-training, reinforcement learning from human feedback, and LLM reasoning. Published at NeurIPS 2024, ICLR 2025, and CIKM 2025.

University of Toronto, Toronto, ON Nov. 2021 – Jun. 2022
Research Assistant
Collaborated with Prof. Scott Sanner on recommendation diversification for variational autoencoder-based recommendation systems. Published at SIGIR 2022.

University of Toronto, Toronto, ON May 2019 – Sep. 2019
Research Assistant
Collaborated with Prof. Baochun Li on optimizing training algorithms for Graph Neural Networks under few-shot or semi-supervised setting. Published at CVPR 2020 and INFOCOM 2020.

INDUSTRY EXPERIENCE

Meta Superintelligence, Remote Aug. 2025 – Present

Meta GenAI, Menlo Park, CA May. 2025 – Aug. 2025
Research Scientist Intern
Collaborating with Dr. Liang Tan, Yuanzhe Pang, Rishabh Agarwal, and Yu Wang on efficient LLM post-training through curriculum learning.

Layer 6 AI, Toronto, ON May 2021 – Aug. 2022
Machine Learning Intern
Collaborated with Dr. Maksims Volkovs on designing new metric loss objective for collaborative filtering. Published at WWW 2022 and RecSys 2022.

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

Activities

Reviewer

- ▷ 2026: WWW
- ▷ 2025: NeurIPS, KDD, WWW, ICML EXAIT, ICML MoFA, ICML AI4MATH
- ▷ 2024: TKDE, ICML ARLET, ICML MHFAIA
- ▷ 2022: TOIS

Teaching

- ▷ Cornell University, Teaching Assistant, CS 4780 Introduction to Machine Learning
- ▷ Cornell University, Guest Lecture, CS 6789 Foundations of Reinforcement Learning

Blogpost

- ▷ ML@CMU, RLHF 101: A Technical Tutorial on Reinforcement Learning from Human Feedback [Link]
- ▷ Huggingface, RLHF 101: A Technical Dive into RLHF [Link]
- ▷ Accelerating RL for LLM Reasoning with Optimal Advantage Regression [Link]

Content Creator

- ▷ Bilibili, 29.0k subscribers, 334.1 likes, 8.9M views [Link]
- ▷ Douyin, 22.4k subscribers, 450.3k likes [Link]
- ▷ YouTube, 1.4k subscribers, 490k views [Link]

Publications

Preprints

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

Conference Proceedings

Y. Dai, **Z. Gao**, Y. Sattar, S. Dean, and J. J Sun *Pre-trained Large Language Models Learn Hidden Markov Models In-context,* in Proceedings of the Advances in Neural Information Processing Systems, 2025.

(α - β) K. Brantley, M. Chen, **Z. Gao**, J. D. Lee, W. Sun, W. Zhan, and X. Zhang, *Accelerating RL for LLM Reasoning with Optimal Advantage Regression,* in Proceedings of the Advances in Neural Information Processing Systems, 2025 (also in New York Reinforcement Learning Workshop 2025 **oral**).

K. Wang*, J. P. Zhou*, J. Chang*, **Z. Gao**, N. Kallus, K. Brantley, W. Sun, *Value-Guided Search for Efficient Chain-of-Thought Reasoning,* in Proceedings of the Advances in Neural Information Processing Systems, 2025.

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,* in Proceedings of the Advances in Neural Information Processing Systems, 2025 (also in New York Reinforcement Learning Workshop 2025).

Z. Gao, J. Zhou, Y. Dai and T. Joachims, *End-to-end Training for Recommendation with Language-based User Profiles,* in Proceedings of Conference on Information and Knowledge Management, 2025 (also in Workshop on Risks, Opportunities, and Evaluation of Generative Models in Recommender Systems at RecSys'24).

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. 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 (also in Models of Human Feedback for AI Alignment Workshop and Aligning Reinforcement Learning Experimentalists and Theorists Workshop (**oral**) at ICML 2024, Workshop on Reinforcement Learning Beyond Rewards at RLC 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.

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, 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.

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, 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, 2020.