

Bolian Li

PhD Student

✉ li4468@purdue.edu

🐙 lblaoke

🌐 lblaoke.github.io

Education

PhD, Computer Science

Purdue University

Advisor: Ruqi Zhang

2022 – Present

West Lafayette, IN, USA

BE, Computer Science and Technology

Tianjin University

Advisor: Changqing Zhang

GPA: 3.8/4.0

2018 – 2022

Tianjin, China

Experiences

Purdue University

Research Assistant, Advisor: Ruqi Zhang

LLM alignment, Bayesian deep learning

Sept. 2022 – Present

University of Illinois Urbana-Champaign

Research Intern, Mentor: Hanghang Tong

Graph representation learning

May 2021 – Nov. 2021

Institute of Computing Technology, Chinese Academy of Sciences

Research Intern, Mentor: Shuhui Wang

Video object detection

Jan. 2021 – Feb. 2021

Tianjin University

Research Assistant, Advisor: Changqing Zhang

Trustworthy machine learning

Sept. 2020 – Dec. 2021

Research Interests

I am interested in the robustness and interpretability of machine-learning models/algorithms in the real world. I focus on the alignment of large language models, the generalization of sampling algorithms, and the learning frameworks for biased data distributions.

Publications

Making Reliable and Flexible Decisions in Long-tailed Classification

Transactions on Machine Learning Research (TMLR)

Bolian Li, Ruqi Zhang

Stochastic Steepest Descent with Acceleration for ℓ_p -Smooth Non-Convex Optimization

Preprint, under review

Xinyu Luo*, Site Bai*, Bolian Li*, Petros Drineas, Ruqi Zhang, Brian Bullins

ETA: Evaluating Then Aligning Safety of Vision Language Models at Inference Time

International Conference on Learning Representations (ICLR 2025)

Yi Ding, Bolian Li, Ruqi Zhang

Cascade Reward Sampling for Efficient Decoding-Time Alignment

Preprint, under review

Bolian Li*, Yifan Wang*, Ananth Grama, Ruqi Zhang

Entropy-MCMC: Sampling from Flat Basins with Ease

International Conference on Learning Representations (ICLR 2024)
Bolian Li, Ruqi Zhang

Long-tailed Classification from a Bayesian-decision-theory Perspective
Symposium on Advances in Approximate Bayesian Inference (AABI 2023)
Bolian Li, Ruqi Zhang

Trustworthy Long-tailed Classifications
The IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR 2022)
Bolian Li, Zongbo Han, Haining Li, Huazhu Fu, Changqing Zhang

Graph Communal Contrastive Learning
The Web Conference (WWW 2022), Oral Presentation
Bolian Li, Baoyu Jing, Hanghang Tong

Services

Reviewer	ICML 2025, NeurIPS 2024; ICLR 2025; AISTATS 2024, 2025; UAI 2024, 2025; SPIGM 2023, 2024; NextGenAISafety 2024
Teaching Assistant	CS 57800; CS 38003; CS 17600

Awards

Tan Xuguang Alumni Scholarship, <i>Tianjin University</i>	2020
Tianjin University Vision Education Fund, <i>Tianjin University</i>	2019