Diantong Li

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Education

The Chinese University of Hong Kong, Shenzhen, BS in Statistics — Sept 2022 - Jul 2026

- **GPA**: 3.959/4.0; Major Ranking: 1/44; School Ranking: 2/320
- **Related Courses:** Probability Theory, Real Analysis , Stochastic Process , Statistical Inference, Bayesian Statistics, Advanced Linear Algebra, Stochastic Simulation
- **Honors and Awards:** Academic Performance Scholarship (2023-2024, top1%; 2022-2023, top5%), Dean's List (2022-2025)

Research Interests

Data-driven Decision Making
Probabilistic Reasoning in Machine Learning
Deep Learning

Publications

Constrained Multi-objective Bayesian Optimization through Optimistic Constraints Estimation — May 2025

Diantong Li, F. Zhang, C. Liu, Y. Chen

International Conference on Artificial Intelligence and Statistics (AISTATS), May 2025. paper; poster

Research Experience

Constrained Multi-objective Bayesian Optimization — Jul 2024 - May 2025

Advised by Prof. Yuxin Chen, University of Chicago — Chicago, IL and Remote

- Designed a constrained multi-objective Bayesian optimization algorithm with a novel optimistic estimation of constraints, showing a superior real-world performance
- Established probabilistic bounds for hypervolume regret and constraint violation, which is the first theoretical study of UCB-type bounds in constrained multi-objective Bayesian optimization
- Conducted simulation experiments on three synthetic and four real-world problems withs manually created real-world drug discovery problems based on large molecule datasets. Experimentally verified the significance of performance, with a well-documented code base for reproducibility
- First-authored paper accepted and presented at International Conference on Artificial Intelligence and Statistics 2025 (AISTATS 2025), Mai Khao, Thailand

Few-shot Bayesian Optimization with Prior-fitted Neural Networks — June 2025 - Present

Advised by Prof. Chong Liu, State University of New York at Albany — Remote

- Proposed a novel knowledge transfer technique for Bayesian optimization, integrated prior meta-learning with prior-fitted neural networks to efficiently capture both query-response and time-series characteristics of related optimization trajectory

Industrial Experience

Anker Innovations × CUHK(SZ) Capstone Project: Advertising and Optimization — Feb 2025 - June 2025

Advertising Algorithm Development Intern — Shenzhen, China

- Proposed a scalable model selection, evaluation and optimization advertising strategy based on deep causal learning
- Helped allocate advertising resource of each Anker's product in Amazon under a strict offline constraint, based on a real-world advertisement dataset containing thousands of products across three global markets over a two-year span

- Led a team of 6 undergraduate students from different majors in CUHK(SZ). Won best capstone project presentation award (top 5 among 23 teams). A poster is available online

Teaching Experience

Undergraduate Student Teaching Fellowship — The Chinese University of Hong Kong, Shenzhen

Honors Probability and Statistics I — Fall 2024
Honors Probability and Statistics II — Spring 2025

Skills

Languages: Python, R

Frameworks: PyTorch, BoTorch, GPyTorch, OR-Tools, CausalML, Gym