

YAN DAI

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EDUCATION

Massachusetts Institute of Technology Operations Research Center 2024 — Now
PhD student in Operations Research co-advised by Prof. Patrick Jaillet and Prof. Negin Golrezaei.

Tsinghua University Andrew C. Yao Class 2020 — 2024
Bachelor of Engineering in Computer Science and Technology. GPA: 3.99/4.00.

RESEARCH EXPERIENCES

Massachusetts Institute of Technology ORC (Cambridge, MA) Sep. 2024 — Now
Research assistant of Prof. Patrick Jaillet and Prof. Negin Golrezaei.

Tsinghua University Andrew C. Yao Class (Beijing, China) Feb. — Jun. 2024
Bachelor's thesis advised by Prof. Longbo Huang.

University of Washington School of CSE (Seattle, WA) Jun. — Aug. 2023
Visiting student hosted by Prof. Simon S. Du.

Massachusetts Institute of Technology LIDS (Cambridge, MA) Feb. — May 2023
Visiting student hosted by Prof. Suvrit Sra.

University of Southern California CS Department (Remote) Feb. — Dec. 2022
Remote visitor of Prof. Haipeng Luo.

Tsinghua University Andrew C. Yao Class (Beijing, China) Jun. — Dec. 2021
Research assistant of Prof. Longbo Huang.

PUBLICATIONS

(* stands for equal contribution. Listed reverse chronologically.)

Journal Publications and Working Drafts

- [12] [Yan Dai](#), Negin Golrezaei, and Patrick Jaillet. “Incentive-Aware Dynamic Resource Allocation under Long-Term Cost Constraints.”
- [11] [COLT’25] [Yan Dai](#), Moïse Blanchard, and Patrick Jaillet. “Non-Monetary Mechanism Design without Distributional Information: Using Scarce Audits Wisely.” [Preprint]
- [10] [POMACS & SIGMETRICS’25] [Yan Dai](#) and Longbo Huang. “Adversarial Network Optimization under Bandit Feedback: Maximizing Utility in Non-Stationary Multi-Hop Networks.” [ACM Journal Page]
Named *Best Paper Finalist (5 in total)* at ACM SIGMETRICS’25.

Conference Publications

- [9] [ICLR’25] Yu Chen*, Jiatai Huang*, [Yan Dai*](#), and Longbo Huang. “uniINF: Best-of-Both-Worlds Algorithm for Parameter-Free Heavy-Tailed MABs.” *Spotlight Paper (5.1%)*. [Preprint] [OpenReview]
- [8] [COLT’24] [Yan Dai](#), Qiwen Cui, and Simon S. Du. “Refined Sample Complexity for Markov Games with Independent Linear Function Approximation.” [Preprint] [Proceeding (Extended Abstract)]
- [7] [ICML’24] Kwangjun Ahn, Zhiyu Zhang, Yunbum Kook, and [Yan Dai](#). “Understanding Adam Optimizer via Online Learning of Updates: Adam is FTRL in Disguise.” [Preprint] [Proceeding]
- [6] [NeurIPS’23] [Yan Dai*](#), Kwangjun Ahn*, and Suvrit Sra. “Curious Role of Normalization in Sharpness-Aware Minimization.” [Preprint] [OpenReview] [Proceeding]

- [5] [ICML'23] [Yan Dai](#), Haipeng Luo, Chen-Yu Wei, and Julian Zimmert. "Refined Regret for Adversarial MDPs with Linear Function Approximation." [Preprint] [Proceeding]
- [4] [ICML'23] Jiatai Huang*, [Yan Dai*](#), and Longbo Huang. "Banker Online Mirror Descent: A Universal Approach for Delayed Online Bandit Learning." [Preprint] [Proceeding]
- [3] [ICLR'23] [Yan Dai](#), Ruosong Wang, and Simon S. Du. "Variance-Aware Sparse Linear Bandits." [Preprint] [OpenReview]
- [2] [NeurIPS'22] [Yan Dai](#), Haipeng Luo, and Liyu Chen. "Follow-the-Perturbed-Leader for Adversarial Markov Decision Processes with Bandit Feedback." [Preprint] [OpenReview] [Proceeding]
- [1] [ICML'22] Jiatai Huang*, [Yan Dai*](#), and Longbo Huang. "Adaptive Best-of-Both-Worlds Algorithm for Heavy-Tailed Multi-Armed Bandits." [Preprint] [Proceeding]

RESEARCH AWARDS AND SCHOLARSHIPS

Research Awards

- Best Paper Finalist (*5 in total*) at ACM SIGMETRICS'25 conference. May 2025
 Paper title: *Adversarial Network Optimization under Bandit Feedback: Maximizing Utility in Non-Stationary Multi-Hop Networks*.

Fellowship and Scholarship

- Outstanding Graduate named by Beijing (*5%*), by Tsinghua (*2%*), and by Yao Class (*10%*). Jun. 2024
- Presidential Scholarship (*top scholarship for Tsinghua undergrads; 10/16,000+*), Tsinghua. Nov. 2023
- Andrew C. Yao Award – Gold Medal (*top scholarship for seniors; 1 student*), Yao Class. Sep. 2023

Competitive Programming

- Gold Medal (*1st place with perfect score*), Asia-Pacific Informatics Olympiad (APIO). May 2019
- Gold Medal (*5th place*), Chinese National Olympiad in Informatics (NOI). Jul. 2018
- Gold Medal, IOI China Team Selection Competition (CTSC). May 2018

Miscellaneous

- 1st Place, MIT Intramurals League on Water Polo. Apr. 2023
- 2nd Place, National Collegiate Water Polo Championships. Jun. 2021
- 1st Place, Tsinghua Swimming Competition on Men's 100m Butterfly. Nov. 2021
- 3rd Place, Tsinghua Swimming Competition on Men's 200m Medley. Nov. 2021

PROFESSIONAL SERVICES

Journal Reviewing. Journal of Machine Learning (JMLR) 2024, Performance Evaluation 2024.

Conference Reviewing. COLT 2025, ICML 2025 / 2023, NeurIPS 2025 / 2024 / 2023 / 2022, ICLR 2025 / 2024, AISTATS 2025 / 2023 / 2022, ALT 2023.