

# YAN DAI

🏠 <https://yandaichn.github.io/>

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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.”  
*Won 1st Place* in ACM Student Research Competition (SRC), SIGMETRICS’25 Graduate Division.
- [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]  
*Won Best Paper Award* at the ACM SIGMETRICS’25 conference.

### 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

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### Research Awards

- Best Paper Award (*1 paper per year*) at ACM SIGMETRICS'25 conference. Jun. 2025
- 1st Place in ACM Student Research Competition (SRC), SIGMETRICS Graduate Division. Jun. 2025

### 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

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**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.