

YAN DAI

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🏠 <https://ydai03.github.io/>

EDUCATION

Yao Class, Institute for Interdisciplinary Information Sciences, Tsinghua 2020 — 2024
Bachelor of Engineering in Computer Science and Technology. GPA: 3.99/4.00.

RESEARCH EXPERIENCES

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

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

Department of CS, University of Southern California (Remote) Feb. 2022 — Jan. 2023
Remote visitor advised by Prof. Haipeng Luo.

Paul G. Allen School, University of Washington (Remote) Nov. 2021 — Mar. 2022
Remote visitor advised by Prof. Simon S. Du.

IIIS, Tsinghua University (Beijing, China) Jun. 2021 — Jan. 2022
Research assistant of Prof. Longbo Huang.

PUBLICATIONS

(* stands for equal contribution; Listed in reverse chronological order.)

Conference Publications

- [8] (**COLT 2024**) [YAN DAI](#), QIWEN CUI, and SIMON S. DU. “Refined Sample Complexity for Markov Games with Independent Linear Function Approximation.” In *Proceedings of Thirty Seventh Conference on Learning Theory*. [PDF] [Proceeding]
- [7] (**ICML 2024**) KWANGJUN AHN, ZHIYU ZHANG, YUNBUM KOOK, and [YAN DAI](#). “Understanding Adam Optimizer via Online Learning of Updates: Adam is FTRL in Disguise.” Accepted to *the 41st International Conference on Machine Learning*. [PDF]
- [6] (**NeurIPS 2023**) [YAN DAI*](#), KWANGJUN AHN*, and SUVRIT SRA. “The Crucial Role of Normalization in Sharpness-Aware Minimization.” In *Advances in Neural Information Processing Systems 36*. [PDF]
- [5] (**ICML 2023**) [YAN DAI](#), HAIPENG LUO, CHEN-YU WEI, and JULIAN ZIMMERT. “Refined Regret for Adversarial MDPs with Linear Function Approximation.” In *Proceedings of the 40th International Conference on Machine Learning*, PMLR 202:6726-6759. [PDF] [Proceeding]
- [4] (**ICML 2023**) JIATAI HUANG*, [YAN DAI*](#), and LONGBO HUANG. “Banker Online Mirror Descent: A Universal Approach for Delayed Online Bandit Learning.” In *Proceedings of the 40th International Conference on Machine Learning*, PMLR 202:13814-13844. [PDF] [Proceeding]
- [3] (**ICLR 2023**) [YAN DAI](#), RUOSONG WANG, and SIMON S. DU. “Variance-Aware Sparse Linear Bandits.” In *the Eleventh International Conference on Learning Representations*. [PDF] [OpenReview]
- [2] (**NeurIPS 2022**) [YAN DAI](#), HAIPENG LUO, and LIYU CHEN. “Follow-the-Perturbed-Leader for Adversarial Markov Decision Processes with Bandit Feedback.” In *Advances in Neural Information Processing Systems 35*. [PDF] [OpenReview] [Proceeding]
- [1] (**ICML 2022**) JIATAI HUANG*, [YAN DAI*](#), and LONGBO HUANG. “Adaptive Best-of-Both-Worlds Algorithm for Heavy-Tailed Multi-Armed Bandits.” In *Proceedings of the 39th International Conference on Machine Learning*, PMLR 162:9173-9200. [PDF] [Proceeding]

SELECTED AWARDS AND SCHOLARSHIPS

Scholarships

- Presidential Scholarship (*top scholarship for Tsinghua undergrads; 10 per year*), Tsinghua. Nov. 2023
- Andrew C. Yao Award – Gold Medal (*top scholarship for Yao Class seniors; 1 student*), IIS. Sep. 2023
- National Scholarship (*top scholarship in China; 0.2% domestically*), Ministry of Education. Dec. 2022
- SenseTime AI Scholarship (*awarded to 30 students in AI research domestically*), SenseTime. Dec. 2022
- “12·9” Scholarship (*top scholarship for Tsinghua sophomores; 1 student per major*), Tsinghua. Dec. 2021

Competitive Programming in High School

- 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

Miscellaneous

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

PROFESSIONAL SERVICES

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