Yan DAI

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Education

Institute for Interdisciplinary Information Sciences,
Tsinghua University, Beijing, China — Sept. 2020 – Present

Computer Science and Technology (Special Pilot Class in CS, **a.k.a.** Yao Class).
GPA: 3.99/4.00; Selected course grades listed below.

Experience

Paul G. Allen School, University of Washington (Seattle, WA, USA) — Summer, 2023

Visiting student, hosted by Prof. Simon S. Du.

LIDS, Massachusetts Institute of Technology (Cambridge, MA, USA) — Spring, 2023

Visiting student, hosted by Prof. Suvrit Sra.

Thomas Lord Department, University of Southern California — Spring – Fall, 2022

Remote visitor, advised by Prof. Haipeng Luo.

Paul G. Allen School, University of Washington — Winter, 2022

Remote visitor, advised by Prof. Simon S. Du.

IIIS, Tsinghua University (Beijing, China) — Summer – Fall, 2021

Research assistant, hosted by Prof. Longbo Huang.

Publications

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

Manuscripts

[6] Yan Dai*, Kwangjun Ahn*, and Suvrit Sra. "The Crucial Role of Normalization in Sharpness-Aware Minimization." *In submission.* [PDF]

Conference Publications

[5] **(ICML 2023)** Yan Dai, Haipeng Luo, Chen-Yu Wei, and Julian Zimmert. "Refined Regret for Adversarial MDPs with Linear Function Approximation." Accpeted to *the 40th International Conference on Machine Learning* (ICML), 2023. [PDF]

[4] **(ICML 2023)** Jiatai Huang*, Yan Dai*, and Longbo Huang. "Banker Online Mirror Descent: A Universal Approach for Delayed Online Bandit Learning." Accpeted to *the 40th International Conference on Machine Learning* (ICML), 2023. [PDF]

[3] **(ICLR 2023)** Yan Dai, Ruosong Wang, and Simon S. Du. "Variance-Aware Sparse Linear Bandits." In *the Eleventh International Conference on Learning Representations* (ICLR), 2023. [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* (NeurIPS), 2022. [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* (ICML), PMLR 162:9173-9200, 2022. [PDF] [Proceeding]

Selected Awards

Scholarship

- National Scholarship *(top scholarship in China; 0.2% domestically)*, Ministry of Education. 2022
- SenseTime AI Scholarship *(30 undergrads domestically)*, SenseTime. 2022
- 12·9 Scholarship *(top scholarship in Tsinghua; 1 student per department)*, Tsinghua University. 2021

Competitive Programming

- Gold Medal *(1st place with perfect score)*, Asia-Pacific Informatics Olympiad (APIO). 2019
- Gold Medal *(5th place)*, Chinese National Olympiad in Informatics (NOI). 2018

Miscellaneous

- 2nd Place, National Collegiate Water Polo Championships. 2021
- 1st Place, Tsinghua Swimming Competition (Men's 100m Butterfly). 2022
- 1st Place, MIT Intramurals League (Water Polo). 2023

Talks

[5] "Refined Regret for Adversarial MDPs with Linear Function Approximation." [PDF]
@ *International Conference on Machine Learning (ICML)*, Hawaii Convention Center, Jul 2023.

[4] "Banker Online Mirror Descent: A Universal Approach for Delayed Online Bandit Learning." [PDF]
@ *International Conference on Machine Learning (ICML)*, Hawaii Convention Center, Jul 2023.

[3] "Variance-Aware Sparse Linear Bandits." [PDF]
@ *International Conference on Learning Representations (ICLR)*, Kigali Convention Centre, May 2023.
@ *FAI-Seminar*, Online, Apr 2023.
@ *Yao Class Seminar*, Tsinghua University, Mar 2023.

[2] "Follow-the-Perturbed-Leader for Adversarial Markov Decision Processes with Bandit Feedback." [PDF]
@ *Conference on Neural Information Processing Systems (NeurIPS)*, Online, Dec 2022.

[1] "Adaptive Best-of-Both-Worlds Algorithm for Heavy-Tailed Multi-Armed Bandits." [PDF]
@ *SparkDay (in Chinese)*, Tsinghua University, May 2022.

Selected Course Grades

- Game Theory **A+**
- Theory of Computation **A+**
- Formal Languages and Automata **A+**
- Advanced Computer Graphics **A+**
- Causal and Statistical Learning **A+**
- Linear Algebra **A+**
- Introduction to Computer Science **A+**
- Computer Architecture **A+**

Academic Services

Conference Reviewing: AISTATS 2022, NeurIPS 2022, AISTATS 2023, ALT 2023, ICML 2023, NeurIPS 2023.