

YIHAN DU

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EDUCATION

Tsinghua University

Institute for Interdisciplinary Information Sciences (headed by Prof. Andrew Chi-Chih Yao)

Ph.D. candidate in Computer Science

Research interest: machine learning theory

September 2018 - June 2023 (expected)

Advisor: Prof. Longbo Huang

Xiamen University

B.E. in Computer Science

September 2014 - June 2018

Rank: 3/93

VISIT & INTERNSHIP

Cornell University

Visiting Ph.D. student (in-person)

Supervisor: Prof. Wen Sun

September 2022 - December 2022

Research topic: reinforcement learning

Microsoft Research (MSR) Asia

Research intern

Supervisor: Dr. Wei Chen (IEEE Fellow, Director of MSR Asia Theory Center)

January 2020 - May 2020

Research topic: online learning

PUBLICATIONS

Yihan Du, Longbo Huang, Wen Sun, “Multi-task Representation Learning for Pure Exploration in Linear Bandits,” International Conference on Machine Learning (ICML), 2023.

Yihan Du, Siwei Wang, Longbo Huang, “Provably Efficient Risk-Sensitive Reinforcement Learning: Iterated CVaR and Worst Path,” International Conference on Learning Representations (ICLR), 2023.

Yihan Du, Wei Chen, Yuko Kuroki, Longbo Huang, “Collaborative Pure Exploration in Kernel Bandit,” International Conference on Learning Representations (ICLR), 2023.

Yihan Du, Wei Chen, “Branching Reinforcement Learning,” International Conference on Machine Learning (ICML), 2022.

Yihan Du, Siwei Wang, Zhixuan Fang, Longbo Huang, “Continuous Mean-Covariance Bandits,” Proceedings of the Conference on Neural Information Processing Systems (NeurIPS), 2021.

Yihan Du, Yuko Kuroki, Wei Chen, “Combinatorial Pure Exploration with Bottleneck Reward Function,” Proceedings of the Conference on Neural Information Processing Systems (NeurIPS), 2021.

Yihan Du, Siwei Wang, Longbo Huang, “A One-Size-Fits-All Solution to Conservative Bandit Problems,” Proceedings of the AAAI Conference on Artificial Intelligence (AAAI), 2021.

Yihan Du*, Yuko Kuroki*, Wei Chen, “Combinatorial Pure Exploration with Full-Bandit or Partial Linear Feedback,” Proceedings of the AAAI Conference on Artificial Intelligence (AAAI), 2021 (*equal contribution).

(* α - β ordering) Wei Chen, **Yihan Du**, Longbo Huang, Haoyu Zhao, “Combinatorial Pure Exploration for Dueling Bandit,” International Conference on Machine Learning (ICML), 2020.

Yihan Du, Siwei Wang, Longbo Huang, “Dueling Bandits: From Two-dueling to Multi-dueling,” Proceedings of the International Conference on Autonomous Agents and Multiagent Systems (AAMAS), 2020.

Yihan Du, Yan Yan, Si Chen, Yang Hua, “Object-adaptive LSTM Network for Real-time Visual Tracking with Adversarial Data Augmentation,” Neurocomputing, 2019.

Yihan Du, Yan Yan, Si Chen, Yang Hua, Hanzi Wang, “Object-adaptive LSTM Network for Visual Tracking,” International Conference on Pattern Recognition (ICPR), 2018.

ACADEMIC SERVICE & ACTIVITIES

Program Committee Member/Reviewer

Conference: ICML 2021-2023, NeurIPS 2021-2023, ICLR 2022-2023

Journal: Transactions on Machine Learning Research (TMLR)

Teaching Assistant

Stochastic Network Optimization, graduate course (IIS, Tsinghua University) *Spring 2021*

Introduction to Computer Science, undergraduate course (Yao Class, Tsinghua University) *Fall 2019*