Pingbang Hu A P III ()

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EDUCATION

University of Illinois Urbana-Champaign

Illinois

Ph.D. Student in Information Science, School of Information Science

Aug. 2023 - Present

o Advisor: Jiagi Ma

o Research Area: Theoretical Artificial Intelligence & Theoretical Computer Science

University of Michigan Michigan

B.Sc. in Computer Science with Summa Cum Laude, College of Engineering $\circ\,$ Minor: Mathematics, College of Literature, Science, and the Arts

Aug. 2021 - May 2023

Shanghai Jiao Tong University

Shanghai, China

B.Eng. in Electrical and Computer Engineering, UM-SJTU Joint Institute

Aug. 2019 - Aug. 2023

o Minor: Computer Science, UM-SJTU Joint Institute

RESEARCH AND INDUSTRY EXPERIENCE

Sugiyama Laboratory, National Institute of Informatics

Tokyo, Japan

* Research Intern

o Advisor: Mahito Sugiyama

May 2024 - Aug. 2024

Theory of Computation Laboratory, University of Michigan

Michigan Mar. 2022 - Dec. 2023

 $Under graduate\ Researcher$ o Advisor: Thatchaphol Saranurak

SURE Program, University of Michigan

Michigan

 $Undergraduate\ Researcher$ o Advisor: Wei Hu

May 2022 - Apr. 2023

FORESEER Research Group, University of Michigan

Michigan

Undergraduate Research Assistant

Dec. 2021 - Jan. 2023

o Advisor: Jiaqi Ma

Chief Noob

Shanghai, China

Backend Developer Oct. 2020 - June 2021

Peer-Reviewed Conference Publications

(* denotes equal contribution)

[C1] Yuzheng Hu*, Pingbang Hu*, Han Zhao, Jiaqi Ma, "Most Influential Subset Selection: Challenges, Promises, and Beyond". In Proceedings of the 38th Advances in Neural Information Processing Systems (NeurIPS 2024) (25.8% accepted rate)

[C2] Junwei Deng*, Ting-Wei Li*, Shiyuan Zhang, Yijun Pan, Hao Huang, Xinhe Wang, Pingbang Hu, Xingjian Zhang, Jiaqi Ma, "dattri: A Library for Efficient Data Attribution". In Proceedings of the 38th Advances in Neural Information Processing Systems Datasets and Benchmarks Track (NeurIPS 2024) (Spotlight)

Pre-prints and Technical Reports

(* denotes equal contribution)

[P1] Pingbang Hu, Mahito Sugiyama, "Pseudo-Non-Linear Data Augmentation via Energy Minimization". In submission

[P2] Xinhe Wang, Pingbang Hu, Junwei Deng, Jiaqi Ma, "Adversarial Attacks on Data Attribution". Preprint 🕒

[P3] Yiwen Tu*, Pingbang Hu*, Jiaqi Ma, "Towards Reliable Empirical Machine Unlearning Evaluation: A Game-Theoretic View". In submission

[T1] Pingbang Hu, "Travel the Same Path: A Novel TSP Solving Strategy". Technical Report 🔁

TEACHING EXPERIENCE

Instructional Aide, University of Michigan

Michigan

Hold discussion and office hour weekly, design assignment and exam problems, grade and guide projects.

o Introduction to Cryptography: An upper-level course on the main undergraduate CS track.

Winter 2023 Fall 2022

• Randomness and Computation: A graduate-level course on the M.S. CS theory track.

Teaching Assistant, Shanghai Jiao Tong University

Shanghai, China

Hold discussion and office hour weekly, design and grade assignments and exams.

Summer 2021

• Honor Mathematics III: An undergraduate-level course on the main B.Eng. ECE track.

Fall 2020

• Honor Mathematics II: An undergraduate-level course on the main B.Eng. ECE track.

Honors and Awards

Excellent Internship Evaluation Best internship evaluation result in National Institute of Informatics	Tokyo, Japan Aug. 2024
Hong Kong, Macao and Taiwan Overseas Chinese Student Scholarship First Prize (Ranked #2) among all HK, MC and TW students in Shanghai Jiao Tong University	Shanghai, China Oct. 2021
Undergraduate Excellent Scholarship * Third Prize among all students in UM-SJTU Joint Institute	Shanghai, China Nov. 2020
Bao Gang Excellent Scholarship *Second Prize (Ranked #3) among all Taiwan students in Shanghai Jiao Tong University	Shanghai, China $June \ 2020$
Hong Kong, Macao and Taiwan Overseas Chinese Student Scholarship First Prize (Ranked #1) among all HK, MC and TW students in UM-SJTU Joint Institute	Shanghai, China Dec. 2019

Professional Service

Conference Reviewer

" ICML 2024, IEEE BigData 2023, ICLR 2025, AAAI 2025