

□ pbb@illinois.edu **□** (+1) 734 882 7750

RESEARCH INTEREST

Machine Learning

Explainable Machine Learning, Trustworthy Machine Learning, Algorithmic Fairness, Graph Learning, Statistical Learning Theory

Theoretical Computer Science

Fast Graph Algorithm, Approximation Algorithm, Computational Complexity, Hardness of Approximation

EDUCATION

University of Illinois Urbana-Champaign

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

o **Advisor**: Jiaqi Ma

University of Michigan

B.Sc. in Computer Science, College of Engineering

o Graduate with Summa Cum Laude

o Minor: Mathematics, College of Literature, Science, and the Arts

National Yang Ming Chiao Tung University

Visiting Scholar

Shanghai Jiao Tong University

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

o Minor: Computer Science, UM-SJTU Joint Institute

Illinois

Aug. 2023-Present

Michigan

Aug. 2021-May 2023

Hsinchu, Taiwan

Jan. 2020-Jul. 2020

Shanghai, China

Aug. 2019-Aug. 2023

RESEARCH AND INDUSTRY EXPERIENCE

Sugiyama Laboratory, National Institute of Informatics

Research Intern

o Advisor: Mahito Sugiyama

Theory of Computation Laboratory, University of Michigan

Undergraduate Researcher

• Advisor: Thatchaphol Saranurak

SURE Program, University of Michigan

 $Under graduate\ Researcher$

o Advisor: Wei Hu

FORESEER Research Group, University of Michigan

Undergraduate Research Assistant

o Advisor: Jiaqi Ma

Chief Noob

* Backend Developer

Tokyo, Japan

May 2024-Aug. 2024

Michigan

Mar. 2022–Dec. 2023

Michigan

May 2022–Apr. 2023

Michigan

Dec. 2021–Jan. 2023

Shanghai, China 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". In submission 🔀
- [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.	
• Introduction to Cryptography: An upper-level course on the main undergraduate CS track.	$Winter\ 2023$
\circ Randomness and Computation: A graduate-level course on the M.S. CS theory track.	Fall 2022

Teaching Assistant, Shanghai Jiao Tong University

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

 $\circ~$ Honor Mathematics III: An undergraduate-level course on the main B.Eng. ECE track.

Summer 2021

* Competition: Hold the 1st UM-SJTU JIntegration Bee competition.

 $\circ\,$ Honor Mathematics II: An undergraduate-level course on the main B.Eng. ECE track. Fall 2020

Honors and Awards	
NeurIPS 2024 Scholar Award Financial Aid Award for NeurIPS 2024	British Columbia, Canada Oct. 2024
Excellent Internship Evaluation Best internship evaluation result in National Institute of Informatics	Tokyo, Japan Aug. 2024
Hong Kong, Macao and Taiwan Overseas Chinese Student Scholars First Prize (Ranked #2) among all HK, MC and TW students in Shanghai Jiao To	-
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 ersity June 2020
Hong Kong, Macao and Taiwan Overseas Chinese Student Scholars First Prize (Ranked #1) among all HK, MC and TW students in UM-SJTU Joint 1	•

PROFESSIONAL SERVICE

Program Committee

AAAI~2025

Conference Reviewer

ICML 2024, IEEE BigData 2023, ICLR 2025