

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

## RESEARCH INTEREST

#### Machine Learning

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

## Theoretical Computer Science

Fast Graph Algorithm, Approximation Algorithm, Hardness of Approximation, Learning Theory

### **EDUCATION**

#### University of Illinois Urbana-Champaign

Illinois

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

Aug. 2023-Present

o Advisor: Jiaqi Ma

o Minor: Statistics, College of Liberal Arts & Sciences

#### University of Michigan

Michigan

B.Sc. in Computer Science with Summa Cum Laude, College of Engineering

Aug. 2021-May 2023

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

#### National Yang Ming Chiao Tung University

Hsinchu, Taiwan

Visiting Scholar

Jan. 2020–Jul. 2020

Shanghai Jiao Tong University

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

Shanghai, China 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

May 2024-Aug. 2024

o Advisor: Mahito Sugiyama

## Theory of Computation Laboratory, University of Michigan

Michigan

Undergraduate Researcher

Mar. 2022–Dec. 2023

 $\circ\,$  Advisor: Thatchaphol Saranurak

## SURE Program, University of Michigan

Michigan

 $Undergraduate\ Researcher$ 

May 2022-Apr. 2023

o Advisor: Wei Hu

Michigan

FORESEER Research Group, University of Michigan Undergraduate Research Assistant

Dec. 2021-Jan. 2023

o **Advisor**: Jiaqi Ma

Shanghai, China

Chief Noob
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)
- [C3] Xinhe Wang, Pingbang Hu, Junwei Deng, Jiaqi Ma, "Adversarial Attacks on Data Attribution". In 2nd Workshop on Attributing Model Behavior at Scale at the Advances in Neural Information Processing Systems (ATTRIB@NeurIPS 2024)

#### Pre-prints and Technical Reports

(\* denotes equal contribution)

- [P1] Pingbang Hu, Mahito Sugiyama, "Pseudo-Non-Linear Data Augmentation via Energy Minimization". In submission
- [P2] 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

Graduate Teaching Assistant, University of Illinois Urbana-Champaign  Hold discussion and office hour weekly, design assignment and exam problems, grade and guide pro	Illinois
• Network Analysis: A graduate-level course on the M.S. IS track.	Spring 2025
Instructional Aide, University of Michigan  Hold discussion and office hour weekly, design assignment and exam problems, grade and guide property.	${\bf Michigan}$
$\circ$ Introduction to Cryptography: An upper-level course on the main undergraduate CS tra	ack. 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  Hold discussion and office hour weekly, design and grade assignments and exams.	Shanghai, China
• Honor Mathematics III: An undergraduate-level course on the main B.Eng. ECE track.	Summer 2021
* Competition: Hold the 1 <sup>st</sup> 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	
HONORS AND AWARDS  Graduate Conference Travel Award  Graduate College's Competition at University of Illinois Urbana-Champaign	Illinois Nov. 2024
Graduate Conference Travel Award Graduate College's Competition at University of Illinois Urbana-Champaign	
Graduate Conference Travel Award  Graduate College's Competition at University of Illinois Urbana-Champaign  NeurIPS 2024 Scholar Award	Nov. 2024 British Columbia, Canada
Graduate Conference Travel Award Graduate College's Competition at University of Illinois Urbana-Champaign NeurIPS 2024 Scholar Award Financial Aid Award for NeurIPS 2024 Excellent Internship Award	Nov. 2024 British Columbia, Canada Oct. 2024 Tokyo, Japan

Shanghai, China

Shanghai, China

 $June\ 2020$ 

Dec. 2019

# PROFESSIONAL SERVICE

# Program Committee

AAAI 2025

# Conference Reviewer

ICML 2024, IEEE BigData 2023, ICLR 2025

Bao Gang Excellent Scholarship

Second Prize (Ranked #3) among all Taiwan students at Shanghai Jiao Tong University

Hong Kong, Macao and Taiwan Overseas Chinese Student Scholarship

\* First Prize (Ranked #1) among all HK, MC and TW students at UM-SJTU Joint Institute