

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
 - Advisor: Jiaqi Ma
- 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 Shanghai, China
 - B.Eng. in Electrical and Computer Engineering, UM-SJTU Joint Institute Aug. 2019–Aug. 2023
 - 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
 - Advisor: Mahito Sugiyama
- Theory of Computation Laboratory, University of Michigan Michigan
 - Undergraduate Researcher Mar. 2022–Dec. 2023
 - Advisor: Thatchaphol Saranurak
- SURE Program, University of Michigan Michigan
 - Undergraduate Researcher May 2022–Apr. 2023
 - Advisor: Wei Hu
- FORESEER Research Group, University of Michigan Michigan
 - Undergraduate Research Assistant Dec. 2021–Jan. 2023
 - 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**) 
- [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** **Illinois**
 - Hold discussion and office hour weekly, design assignment and exam problems, grade and guide projects.*
 - Network Analysis**: A graduate-level course on the M.S. IS track. **Spring 2025**
- 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**
 - 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.*
 - 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**.
 - Honor Mathematics II**: An undergraduate-level course on the main B.Eng. ECE track. **Fall 2020**

HONORS AND AWARDS

- Graduate Conference Travel Award** **Illinois**
 - Graduate College's Competition in University of Illinois Urbana-Champaign* **Nov. 2024**
- NeurIPS 2024 Scholar Award** **British Columbia, Canada**
 - Financial Aid Award for NeurIPS 2024* **Oct. 2024**
- Excellent Internship Evaluation** **Tokyo, Japan**
 - Best internship evaluation result in National Institute of Informatics* **Aug. 2024**
- Hong Kong, Macao and Taiwan Overseas Chinese Student Scholarship** **Shanghai, China**
 - First Prize (Ranked #2) among all HK, MC and TW students in Shanghai Jiao Tong University* **Oct. 2021**
- Undergraduate Excellent Scholarship** **Shanghai, China**
 - Third Prize among all students in UM-SJTU Joint Institute* **Nov. 2020**
- Bao Gang Excellent Scholarship** **Shanghai, China**
 - Second Prize (Ranked #3) among all Taiwan students in Shanghai Jiao Tong University* **June 2020**
- Hong Kong, Macao and Taiwan Overseas Chinese Student Scholarship** **Shanghai, China**
 - First Prize (Ranked #1) among all HK, MC and TW students in UM-SJTU Joint Institute* **Dec. 2019**

PROFESSIONAL SERVICE

- Program Committee**
 - AAAI 2025*
- Conference Reviewer**
 - ICML 2024, IEEE BigData 2023, ICLR 2025*