

RESEARCH INTEREST

Machine Learning

- *Trustworthy Machine Learning, Data-Centric AI, Statistical Learning Theory, Manifold and Graph Learning*

Theoretical Computer Science

- *Fast Graph Algorithm, Approximation Algorithm, Learning Theory*

EDUCATION

University of Illinois Urbana-Champaign

Illinois

- *Ph.D. Candidate in Information Science, School of Information Science*

Aug. 2023–Present

- **Advisor:** Jiaqi Ma

University of Illinois Urbana-Champaign

Illinois

- *M.S. in Applied Mathematics, College of Liberal Arts & Sciences*

Aug. 2023–Aug. 2025

- **Concentration:** Optimization and Algorithms

University of Michigan

Michigan

- *B.S. in Computer Science with **Summa Cum Laude**, College of Engineering*

Aug. 2021–May 2023

- **Minor:** Mathematics, College of Literature, Science, and the Arts

Shanghai Jiao Tong University

Shanghai, China

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

Aug. 2019–Aug. 2023

- **Minor:** Computer Science, UM-SJTU Joint Institute

RESEARCH AND INDUSTRY EXPERIENCE

Deep Learning Research, Susquehanna International Group

Pennsylvania

- *Machine Learning Ph.D. Intern*

(Incoming) June 2026–Aug. 2026

Alignment Science Team, Anthropic

San Francisco

- *AI Safety Research Fellows*

(Incoming) Nov. 2025–May. 2026

AWS AI Lab, Amazon

New York

- *Applied Scientist Intern*

May 2025–Aug. 2025

Sugiyama Laboratory, National Institute of Informatics

Tokyo, Japan

- *Research Intern*

May 2024–Aug. 2024

- **Advisor:** Mahito Sugiyama

SURE Program, University of Michigan

Michigan

- *Undergraduate Researcher*




May 2022–Apr. 2023

- **Advisor:** Wei Hu

PEER-REVIEWED CONFERENCE PUBLICATIONS

(* denotes equal contribution)

- [C1] **Pingbang Hu**, Joseph Melkonian, Weijing Tang, Han Zhao, Jiaqi W. Ma, “GRASS: Scalable Data Attribution with Gradient Sparsification and Sparse Projection”. In *Proceedings of the 39th Advances in Neural Information Processing Systems* (NeurIPS 2025) 
- [C2] Yiwen Tu*, **Pingbang Hu***, Jiaqi W. Ma, “A Reliable Cryptographic Framework for Empirical Machine Unlearning Evaluation”. In *Proceedings of the 39th Advances in Neural Information Processing Systems* (NeurIPS 2025) 
- [C3] Xinhe Wang, **Pingbang Hu**, Junwei Deng, Jiaqi W. Ma, “Adversarial Attacks on Data Attribution”. In *Proceedings of the 13th International Conference on Learning Representations* (ICLR 2025) 
- [C4] Yuzheng Hu, **Pingbang Hu**, Han Zhao, Jiaqi W. Ma, “Most Influential Subset Selection: Challenges, Promises, and Beyond”. In *Proceedings of the 38th Advances in Neural Information Processing Systems* (NeurIPS 2024) 
- [C5] Junwei Deng*, Ting-Wei Li*, Shiyuan Zhang, Yijun Pan, Hao Huang, Xinhe Wang, **Pingbang Hu**, Xingjian Zhang, Jiaqi W. 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**) 

- [P1] Junwei Deng*, Yuzheng Hu*, **Pingbang Hu***, Ting-Wei Li*, Shixuan Liu*, et al., “A Survey of Data Attribution: Methods, Applications, and Evaluation in the Era of Generative AI”. *In submission* 
- [P2] **Pingbang Hu**, Mahito Sugiyama, “Pseudo-Non-Linear Data Augmentation via Energy Minimization”. *In submission* 
- [T1] **Pingbang Hu**, “Travel the Same Path: A Novel TSP Solving Strategy”. *Technical Report* 

TEACHING EXPERIENCE

- | | |
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| Graduate Teaching Assistant, University of Illinois Urbana-Champaign | Illinois |
| <ul style="list-style-type: none"> Hold discussion and office hours weekly, design assignments and exam problems, grade and guide projects. <ul style="list-style-type: none"> Network Analysis: A graduate-level course on the M.S. IS track. | Spring 2025 |
| Instructional Aide, University of Michigan | Michigan |
| <ul style="list-style-type: none"> Hold discussion and office hours weekly, design assignments and exam problems, grade and guide projects. <ul style="list-style-type: none"> Introduction to Cryptography: An upper-level course on the main undergraduate CS track. Randomness and Computation: A graduate-level course on the M.S. CS theory track. | Winter 2023
Fall 2022 |
| Teaching Assistant, Shanghai Jiao Tong University | Shanghai, China |
| <ul style="list-style-type: none"> Hold discussion and office hours weekly, design and grade assignments and exams. <ul style="list-style-type: none"> Honor Mathematics III: An undergraduate-level course on the main B.Eng. ECE track. * Competition: Hold the 1st UM-SJTU JIntegration Bee competition. Honor Mathematics II: An undergraduate-level course on the main B.Eng. ECE track. | Summer 2021
Fall 2020 |

HONORS AND AWARDS

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| Graduate Conference Travel Award | Illinois |
| Graduate College's Competition at University of Illinois Urbana-Champaign | Nov. 2024 |
| NeurIPS 2024 Scholar Award | British Columbia, Canada |
| Financial Aid Award for NeurIPS 2024 | Oct. 2024 |
| Excellent Internship Award | Tokyo, Japan |
| Excellent (best) internship evaluation at 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 at Shanghai Jiao Tong University | Oct. 2021 |
| Undergraduate Excellent Scholarship | Shanghai, China |
| Third Prize among all students at UM-SJTU Joint Institute | Nov. 2020 |
| Bao Gang Excellent Scholarship | Shanghai, China |
| Second Prize (Ranked #3) among all Taiwan students at 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 at UM-SJTU Joint Institute | Dec. 2019 |

PROFESSIONAL SERVICE

- Program Committee**
 - AAAI 2025
- Conference Reviewer**
 - ICLR 2026, NeurIPS 2025, ICLR 2025, ICML 2024, IEEE BigData 2023