

## 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) Jan. 2026–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<sup>\*</sup>, Yuzheng Hu<sup>\*</sup>, **Pingbang Hu<sup>\*</sup>**, Ting-Wei Li<sup>\*</sup>, Shixuan Liu<sup>\*</sup>, 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

- Graduate Teaching Assistant, University of Illinois Urbana-Champaign** **Illinois**
- Hold discussion and office hours weekly, design assignments 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 hours weekly, design assignments 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 hours 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 1<sup>st</sup> UM-SJTU **JIntegration Bee competition**.
    - Honor Mathematics II**: An undergraduate-level course on the main B.Eng. ECE track. Fall 2020

## HONORS AND AWARDS

- Anthropic AI Safety Research Fellowship** **San Francisco**
- Fellows Program for AI Safety Research at Anthropic Oct. 2025
- 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