

# Pingbang Hu



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## RESEARCH INTEREST

### Machine Learning

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

### Theoretical Computer Science

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

## EDUCATION

### University of Illinois Urbana-Champaign

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

- Advisor: Jiaqi Ma

Illinois

Aug. 2023–Present

### University of Illinois Urbana-Champaign

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

- Concentration: Optimization and Algorithms

Illinois

Aug. 2023–Aug. 2025

### University of Michigan

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

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

Michigan

Aug. 2021–May 2023

### Shanghai Jiao Tong University

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

- Minor: Computer Science, UM-SJTU Joint Institute

Shanghai, China

Aug. 2019–Aug. 2023

## RESEARCH AND INDUSTRY EXPERIENCE

### Deep Learning Research, Susquehanna International Group

▪ *Machine Learning Ph.D. Intern*

Pennsylvania

(Incoming) June 2026–Aug. 2026

### Alignment Science Team, Anthropic

▪ *AI Safety Research Fellows*

San Francisco

Jan. 2026–May 2026

### AWS AI Lab, Amazon

▪ *Applied Scientist Intern*

New York

May 2025–Aug. 2025

### Sugiyama Laboratory, National Institute of Informatics

▪ *Research Intern*

- Advisor: Mahito Sugiyama

Tokyo, Japan

May 2024–Aug. 2024

### SURE Program, University of Michigan

▪ *Undergraduate Researcher*

- Advisor: Wei Hu

Michigan

May 2022–Apr. 2023

## PEER-REVIEWED CONFERENCE PUBLICATIONS

(\* denotes equal contribution)

- [C1] **Pingbang Hu**, Mahito Sugiyama, “Pseudo-Nonlinear Data Augmentation: A Constrained Energy Minimization Viewpoint”. In *Proceedings of the 14th International Conference on Learning Representations* (ICLR 2026)
- [C2] **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)
- [C3] 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)
- [C4] 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)
- [C5] 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)
- [C6] 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* 

[T1] **Pingbang Hu**, “Travel the Same Path: A Novel TSP Solving Strategy”. *Technical Report* 

## TEACHING EXPERIENCE

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<b>Graduate Teaching Assistant, University of Illinois Urbana-Champaign</b>	<b>Illinois</b>
Hold discussion and office hours weekly, design assignments and exam problems, grade and guide projects.	
◦ <b>Network Analysis</b> : A graduate-level course on the M.S. IS track.	<i>Spring 2025, Spring 2026</i>
<b>Instructional Aide, University of Michigan</b>	<b>Michigan</b>
Hold discussion and office hours weekly, design assignments and exam problems, grade and guide projects.	
◦ <b>Introduction to Cryptography</b> : An upper-level course on the main undergraduate CS track.	<i>Winter 2023</i>
◦ <b>Randomness and Computation</b> : A graduate-level course on the M.S. CS theory track.	<i>Fall 2022</i>
<b>Teaching Assistant, Shanghai Jiao Tong University</b>	<b>Shanghai, China</b>
Hold discussion and office hours weekly, design and grade assignments and exams.	
◦ <b>Honor Mathematics III</b> : An undergraduate-level course on the main B.Eng. ECE track.	<i>Summer 2021</i>
* <b>Competition</b> : Hold the 1 <sup>st</sup> UM-SJTU JIntegration Bee competition.	
◦ <b>Honor Mathematics II</b> : An undergraduate-level course on the main B.Eng. ECE track.	<i>Fall 2020</i>

## HONORS AND AWARDS

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<b>Anthropic AI Safety Research Fellowship</b>	<b>San Francisco</b>
Fellows (32 out of 2000+ applicants worldwide) for AI Safety Research at Anthropic	<i>Oct. 2025</i>
<b>Graduate Conference Travel Award</b>	<b>Illinois</b>
Graduate College’s Competition at University of Illinois Urbana-Champaign	<i>Nov. 2024</i>
<b>NeurIPS 2024 Scholar Award</b>	<b>British Columbia, Canada</b>
Financial Aid Award for NeurIPS 2024	<i>Oct. 2024</i>
<b>Excellent Internship Award</b>	<b>Tokyo, Japan</b>
Excellent (best) internship evaluation at National Institute of Informatics	<i>Aug. 2024</i>
<b>Hong Kong, Macao and Taiwan Overseas Chinese Student Scholarship</b>	<b>Shanghai, China</b>
First Prize (Ranked #2) among all HK, MC, and TW students at Shanghai Jiao Tong University	<i>Oct. 2021</i>
<b>Undergraduate Excellent Scholarship</b>	<b>Shanghai, China</b>
Third Prize among all students at UM-SJTU Joint Institute	<i>Nov. 2020</i>
<b>Bao Gang Excellent Scholarship</b>	<b>Shanghai, China</b>
Second Prize (Ranked #3) among all Taiwan students at Shanghai Jiao Tong University	<i>June 2020</i>
<b>Hong Kong, Macao and Taiwan Overseas Chinese Student Scholarship</b>	<b>Shanghai, China</b>
First Prize (Ranked #1) among all HK, MC, and TW students at UM-SJTU Joint Institute	<i>Dec. 2019</i>

## PROFESSIONAL SERVICE

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<b>Program Committee</b>	
AAAI 2025	
<b>Conference Reviewer</b>	
ICML 2026, ICLR 2026, NeurIPS 2025, ICLR 2025, ICML 2024, IEEE BigData 2023	
<b>Journal Reviewer</b>	
TMLR	