Jin Huang — Curriculum Vitae

Personal Website | huangjin@umich.edu | Google Scholar | +1 (734) 834-7399

RESEARCH INTEREST

Knowledge Foundation Model, Deep Learning for Graphs, Trustworthy Machine Learning, AI4Science.

EDUCATION

University of Michigan, Ann Arbor

Ph.D. in Information

Ann Arbor, Michigan Aug 2024 - Apr 2029 (expected)

O Advised by Professor Qiaozhu Mei.

University of Michigan, Ann Arbor

Bachelor of Science in Computer Science

Ann Arbor, Michigan Aug 2022 - Jun 2024

o GPA: 3.96/4.0.

Shanghai Jiao Tong University

Shanghai

Bachelor of Science in Electronic and Computer Engineering (Dual Degree Program)

Sep 2020 - Jun 2024

○ GPA: 3.78/4.0 (top 10%).

PUBLICATIONS

- [1] **Huang, Jin**, Xingjian Zhang, Qiaozhu Mei, and Jiaqi Ma. Can LLMs Effectively Leverage Graph Structural Information: When and Why. *arXiv* preprint arXiv:2309.16595, 2023. In *Transactions on Machine Learning Research* (*TMLR*) and GLFrontiers Workshop, NeurIPS 2023 [pdf]
- [2] Chen, Lu, Siyu Lou, Keyan Zhang, **Jin Huang**, and Quanshi Zhang. HarsanyiNet: Computing Accurate Shapley Values in a Single Forward Propagation. In *Proceedings of the 40th International Conference on Machine Learning*, 4804–4825. PMLR, 2023. (1827/6538, 27.9%)[pdf]
- [3] Ma, Jiaqi, Xingjian Zhang, Hezheng Fan, **Jin Huang**, Tianyue Li, Ting Wei Li, Yiwen Tu, Chenshu Zhu, and Qiaozhu Mei. Graph Learning Indexer: A Contributor-Friendly and Metadata-Rich Platform for Graph Learning Benchmarks. In *Proceedings of the First Learning on Graphs Conference*, 7:1–7:23. PMLR, 2022. (**Oral**, 9/185, 4.6%)) [pdf]
- [4] Zhang, Xingjian, Yutong Xie, **Jin Huang**, Jinge Ma, Zhaoying Pan, Qijia Liu, Ziyang Xiong et al. "MASSW: A New Dataset and Benchmark Tasks for AI-Assisted Scientific Workflows." arXiv preprint arXiv:2406.06357, 2024. [pdf]
- [5] Huang, Benhao, Yingzhuo Yu, **Jin Huang**, Xingjian Zhang, and Jiaqi Ma. "DCA-Bench: A Benchmark for Dataset Curation Agents." *arXiv preprint arXiv:2406.07275*, 2024. [pdf]
- [6] Li, Sihang*, **Huang**, **Jin***, Jiaxi Zhuang, Yaorui Shi, Xiaochen Cai, Mingjun Xu, Xiang Wang, Linfeng Zhang, Guolin Ke, and Hengxing Cai. "SciLitLLM: How to Adapt LLMs for Scientific Literature Understanding." arXiv preprint arXiv:2408.15545, 2024. [pdf]

PRESENTATIONS

37th Conference on Neural Information Processing Systems *Poster Presentation for* [1].

Dec 2023

New Orleans, Louisiana

Last Updated: August 31, 2024

40th International Conference on Machine Learning

Poster Presentation for [2].

Jul 2023 Honolulu, Hawaii

ACADEMIC SERVICE

Reviewer for ICLR, 2024; ICML 2024; KDD 2024 AIBS Workshop; KDD 2025. Student Volunteer for ICML, 2023.

WORK EXPERIENCE

Intel Asia-Pacific Research & Development Ltd

AI Software Platform Intern

Dec 2021 - Mar 2022 Shanghai

- o Participated in the development of BigDL, a large-scale AI application for distributed big data analytics, scaling from laptops to cloud infrastructures.
- Maintained an open-source time series analysis project with 4k+ GitHub stars and developed a GAN-based fraud detection algorithm for cash flow.

TEACHING EXPERIENCE

Shanghai Jiao Tong University

May 2022 - Aug 2022

Teaching Assistant for VG101: Introduction to Computers and Programming

Shanghai

O Hosted weekly lab sessions and office hours. Assisted in grading and designing exam problems.

ACTIVITIES, HONORS & SKILLS

Activities: First Generation Engineers Program at University of Michigan.

Honors: Tau Beta Pi, First-Generation Undergraduate Experiential Learning Funding 2022&2023, First Prize in China National Olympiad in Informatics in Provinces (NOIP 2018).

Computer Languages: Python, C++, C, Matlab, Latex, HTML, Bash, Verilog, R, JavaScript.

Tools: Prompting Engineering, Git, Linux, PyTorch, TensorFlow, Scikit-Learn, Jupyter Notebook, Docker.

SELECTED COURSES

- o **Graduate Level:** Information Theory, Machine Learning, Continuous Optimization Methods, Network Theory, Nonlinear Programming, Natural Language Processing, Numerical Linear Algebra.
- Undergraduate Level: Intro to Operating System, Computer Networks, Intro to Autonomous Robotics, Foundations of Computer Science, Computer Vision, Data Structures and Algorithms, Intro to Computer Organization, Human-Centered Software Design, Linear Algebra, Probabilistic Methods in Engineering.