Yiming Sun

Curriculum Vitae

Department of Computing Engineering

University of Pittsburgh

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Education

2022–present **PhD student, Computer Engineering**, *University of Pittsburgh*, US.

Advisor: Dr. Xiaowei Jia

2018–2022 **Bachelor of Science, Computer Science and Technology**, *University of Science and Technology of China*, China.

GPA: 90.5/100, Ranking: 9th/178. Selected awards: Excellent Student Scholarship Gold Award (top 3%)

Publications

- 2024 **Yiming Sun**, Xumeng Wen, Shun Zheng, Xiaowei Jia, and Jiang Bian. Scaling generative tabular learning for large language models. *NeurIPS 2024 Third Table Representation Learning Workshop*, 2024.
- 2024 **Yiming Sun**, Yuhe Gao, Runxue Bao, Gregory F Cooper, Jessi Espino, Harry Hochheiser, Marian G Michaels, John M Aronis, and Ye Ye. Online transfer learning for rsv case detection. *The 12th IEEE International Conference on Healthcare Informatics (Best Paper Award)*, 2024.
- 2023 **Yiming Sun***, Runxue Bao*, Yuhe Gao, Jindong Wang, Qiang Yang, Haifeng Chen, Zhi-Hong Mao, and Ye Ye. A survey of heterogeneous transfer learning. In *arXiv preprint arXiv:2310.08459*, 2023.
- **Yiming Sun***, Zixing Song*, and Irwin King. Score-based graph generative model for neutrino events classification and reconstruction. In *Machine Learning and the Physical Sciences Workshop at the 37th conference on Neural Information Processing Systems (NeurIPS), 2021.*

Research Experience

- May 2024 **Tabular Learning for Large Language Models**, Advised by Dr. Shun Zheng and Xumeng Wen.
- Present Engaging in an innovative research project focused on generative tabular learning (GTL) to enhance predictive modeling for tabular data. Developing methods to scale datasets and sequence lengths, continually pre-training large language models (LLMs) for improved generalization and performance in diverse prediction tasks, ultimately closing the gap with traditional optimization-based models.
- Nov 2023 Temporal Domain Generalization, Advised by Dr. Ye Ye and Dr. Xiaowei Jia.
 - Present Engaging in an innovative research project centered on Temporal Domain Generalization. Developing a model capable of integrating temporal domain shifts to enhance the model's adaptability and accuracy in dynamic temporal environments.
- Jan 2023 Heterogeneous Transfer Learning Survey, Advised by Dr. Ye Ye.
- Oct 2023 Led a comprehensive survey on heterogeneous transfer learning, evaluating over 60 methods. Examined various techniques across multiple learning scenarios and applications. Addressed limitations of current studies to guide future research.
- Jul 2021 Neutrino Event Classification Using Graph Neural Networks, Advised by Dr. Irwin King.
- Sept 2021 Developed research on Graph Neural Networks for neutrino event classification in IceCube. Enhanced graph construction using score-based generative models, improving downstream task performance. Presented findings at NeurIPS 2021's Machine Learning and Physical Sciences workshop.

Work Experience

Fall 2024 Guest Lecturer, ECE 2556, University of Pittsburgh.

Summer 2024 Research Intern, Microsoft Research Asia.

2022–present **Graduate Student Researcher**, University of Pittsburgh.

Fall 2021 **Teaching Assistant**, Foundation of Algorithms, University of Science and Technology of China.

Summer 2021 Research Intern, The Chinese University of Hong Kong.