Tao Wen

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Research Interests

Graph Learning, Trustworthy Machine Learning

Education

Sep. 2024 – present	**Dartmouth College**, Hanover, NH, U.S. Ph.D. student in Computer Science, Advisor: Yujun Yan
Aug. 2022 – May 2024	**New York University**, New York, NY, U.S. Master of Science in Data Science, Center for Data Science
Sep. 2018 – Jun. 2022	**Renmin University of China**, Beijing, China Bachelor of Science in Data Science, School of Statistics

Research Publications

1. **T. Wen**, E. Chen, and Y. Chen, "Tensor-view topological graph neural network," in *Proceedings of The 27th International Conference on Artificial Intelligence and Statistics*, S. Dasgupta, S. Mandt, and Y. Li, Eds., ser. Proceedings of Machine Learning Research, vol. 238, PMLR, Feb. 2024, pp. 4330–4338. 🔗 URL: https://proceedings.mlr.press/v238/wen24a.html.

Experiences

Research

May 2024 – Oct. 2024	**Mitigating Spurious Correlations for Group Robustness** Proposed Elastic Representation to address spurious correlations and improve worst-group accuracy without a severe sacrifice of overall accuracy.
Aug. 2023 – Jan. 2024	**Domain Adaptive Graph Classification via Label Propagation** Developed an approach for domain adaptive graph classification and bridged traditional domain adaptation methods and graphs.
Mar. 2023 – Aug. 2023	**Tensor-view Topological Graph Neural Network** Developed the first approach bridging tensor methods with multi-modal graph structural features.

Internship

Mar. 2022 – Jul. 2022	**Machine Learning Engineer**, ByteDance, Beijing, China Collaboratively developed a model with two teammates to predict user Life-Time Values across six apps, each with significantly different data sizes and distributions, for targeted advertisement on a petabyte scale. Improved the composite six-in-one model (trained on data from six apps and individually evaluated on each) to surpass the performance of single-app models by up to 2% in regression AUC.

Experiences (continued)

Teaching

Jan. 2025 – Mar. 2025   **Teaching Assistant**, Department of Computer Science, Dartmouth College
Served as the teaching assistant for COSC 74/274: Machine Learning.
Gave homework tutorials and held office hours.

Sep. 2023 – Dec. 2023   **Section Leader**, Center for Data Science, New York University
Served as the section leader for DS-GA 1018: Probabilistic Time Series Analysis.
Led lab sections on the implementation of essential time series methods and
held office hours.

Awards

2018-2021   **Academic Excellence Award**, Renmin University of China, 3x recipient.

2019-2020   **Xin-Shan Academic Excellence Award**, top 10% undergraduates university-wide.

2020   **Meritorious winner of Mathematical Contest in Modeling**, top 6% in 13749 teams.