Zheyuan (Jason) Zhang

 Homepage in Linkedin **O** GitHub

Education

University of Notre Dame

South Bend, IN

Ph.D. in Computer Science

Jul. 2023 - Present

o Research Interest: Graph Neural Network, Retrieval Augmented Generation, Recommendation System

New York University, M.S. Aug. 2019 – Aug. 2020

Wuhan University, B.E.

Sept. 2015 - Jun. 2019

o Awards: 1st Class Scholarship 2016 - 2018, Leijun Scholarship 2018

Professional Experience

Coleridge Initiative, Inc.

New York, NY

Research Scientist

Oct. 2021 - Mar. 2023

- o Lead the research project Food for Thought: using ML Methods to link food and nutrition databases on a security platform. Responsible for the toolkit and evaluation pipelines and communications between teams. Check this blog for the competition. Lead the *Unemployment Insurance* project, developing a real-time system to monitor the trend of unemployment rate for IL, IN, TN states.
- Lead the Data Team of Coleridge, responsible for all incoming data ingestion and ETL pipelines.

Associated Research Scientist

Aug. 2020 – Oct. 2021

- o Responsible for the Rich Context project. This research project aims to identify and extract dataset mentions from full-text social science publications.
- o Host the Kaggle Competition Show US the data. Responsible for establishing a benchmark for the competition along with technical implementation. A paper is accepted to Harvard Data Science Review [4].

Junior Research Scientist (Intern)

Oct. 2019 - Aug. 2020

• Work on KG completion and text entity extraction tasks for establishing a large-scale KG for *Rich Context* Competition.

US Ignite, Inc.

New York, NY

Research Fellow (Intern)

Mar. 2020 - Aug. 2020

o Research on the Smart Monitor for Accelerating Regional Transformation project. Cooperate with senior research fellows to develop a recommendation system to help small business owners find better business locations.

Selected Publications

[1] Diet-ODIN: A Novel Framework for Opioid Misuse Detection with Interpretable Dietary Patterns [KDD'24]

o Zheyuan Zhang, Zehong Wang, Shifu Hou, Evan Hall, Landon Bachman, Vincent Galassi, Jasmine White, Nitesh V Chawla, Chuxu Zhang, Yanfang Ye

[2] MOPI-HFRS: A Multi-objective Personalized Health-aware Food Recommendation System with LLM-enhanced **Interpretation** [KDD'25]

- o Zheyuan Zhang, Zehong Wang, Tianyi Ma, Varun Sameer Taneja, Sofia Nelson, Nhi Ha Lan Le, Keerthiram Murugesan, Mingxuan Ju, Nitesh V Chawla, Chuxu Zhang, Yanfang Ye
- [3] Subgraph Pooling: Tackling Negative Transfer on Graphs [IJCAI'24]
- o Zehong Wang, **Zheyuan Zhang**, Chuxu Zhang, Yanfang Ye

[4] Data inventories for the modern age? Using data science to open government data [HDSR'22]

- o Julia Lane, Ernesto Gimeno, Ekaterina Levitskaya, **Zheyuan Zhang**, Alberto Zigoni
- [5] Computation Tree: A Transferable Pattern Towards Graph Foundation Models [NIPS'24]
- o Zehong Wang, **Zheyuan Zhang**, Chuxu Zhang, Yanfang Ye

[6] Training MLPs on Graphs without Supervision [WSDM'25]

o Zehong Wang, Zheyuan Zhang, Nitesh V Chawla, Chuxu Zhang, Yanfang Ye

Service

- Conference Program Committee: KDD'25, RelKDD'24, SDM'25
- o Journal Reviewer: Transactions on Big Data, Transactions on the Web, Data Mining and Knowledge Discovery
- Teaching Assistant: FA23-CSE-40113, SP24-CSE-40113: Design/Analysis of Algorithms