## Zheyuan Liu

#### PERSONAL INFORMATION

Zheyuan Liu University of Notre Dame Holy Cross Dr, 46556, Notre Dame, IN

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#### EDUCATION

09/2019 - 05/2023	B.S Computer Science
	<b>B.S Applied Mathematics</b> (double-major)
	Brandeis University, Waltham, MA, USA
	Cumulative GPA: 3.87

## 09/2023– Current PhD Computer Science University of Notre Dame, Notre Dame, IN, USA Cumulative GPA: 4.00 Advisor: Prof. Meng Jiang

### **RESEARCH INTEREST**

**Privacy Preservation Machine Learning:** Large Language Model (LLM) Security, Machine Unlearning, Approximate Unlearning, Data Privacy

Knowledge-based Model Editing (KME): Knowledge Update, Knowledge Conflict, Model Editing

**Data-Centric Problem and Learning:** Data Augmentation, Data Generation, Generative AI

Machine Learning and on Graphs: Model Fairness, Model Robustness, Trustworthy-AI

### PUBLICATIONS

1. LIU, ZHEYUAN, DOU, G., TAN, Z., TIAN, Y., AND JIANG, M. Towards safer large language models through machine unlearning. *arXiv preprint arXiv:2402.10058* (2024, Under Review of ACL)

- 2. LIU, ZHEYUAN, HE, X., TIAN, Y., AND CHAWLA, N. Can we soft prompt llms for graph learning tasks? In *arXiv preprint arXiv:2402.10359* (2024, Under Review of WWW Short Paper)
- 3. LIU, ZHEYUAN, DOU, G., TIAN, Y., ZHANG, C., CHIEN, E., AND ZHU, Z. Breaking the trilemma of privacy, utility, efficiency via controllable machine unlearning. In *The Web* Conference (WWW) (2024)
- 4. LIU, ZHEYUAN, ZHANG, C., TIAN, Y., ZHANG, E., HUANG, C., YE, Y., AND ZHANG, C. G-FAME: Fair graph representation learning via diverse mixture of experts. In *The Web* Conference (WWW) (2023)
- 5. TAN, Z., ZENG, Q., TIAN, Y., **LIU, ZHEYUAN**, YIN, B., AND JIANG, M. Democratizing large language models via personalized parameter-efficient fine-tuning. *arXiv preprint arXiv:2402.04401* (2024, Under Review of KDD)
- 6. TIAN, Y., ZHANG, C., KOU, Z., **LIU**, **ZHEYUAN**, ZHANG, X., AND CHAWLA, N. Ugmae: A unified framework for graph masked autoencoders. Under Review of IEEE Transactions on Neural Networks and Learning Systems (2024)
- ZHANG, C., TIAN, Y., JU, M., LIU, ZHEYUAN, YE, Y., CHAWLA, N., AND ZHANG, C. Chasing all-round graph representation robustness: Model, training, and optimization. In *ICLR* (2023)
- 8. WU, J., ZHANG, C., **LIU**, **ZHEYUAN**, ZHANG, E., WILSON, S., AND ZHANG, C. Graph-BERT: Bridging graph and text for malicious behavior detection on social media. In *ICDM* (2022)
- 9. WANG, Y., PENG, H. M., SHA, L., **LIU, ZHEYUAN**, AND HONG, P. State-level covid-19 trend forecasting using mobility and policy data. *medRxiv* (2021)

#### TEACHING EXPERIENCE

09/2021 – 05/2023 Brandeis University, Waltham, MA Teaching Assistant

- Acted as teaching assistant for **COSI 10a** (Python), **COSI 12b** (JAVA), **COSI 103a** (Fundamentals of Software Engineering) and **COSI 131a** (Operating System class), held office hours each week helping students with programming assignments and questions about the content from the lecture.
- Assisted Professor grade assignments, exams and gave feedback to students.

# 09/2023 – Current University of Notre Dame,

Teaching Assistant

- Acted as teaching assistant for **CSE-40923** (Case Studies in Computing-Based Entrepreneurship class), held office hours each week helping students with programming assignments and questions about the content from the lecture.
- Assisted Professor grade assignments, exams and gave feedback to students.

## Honors, Awards & Scholarships

05/2023	Molly W. and Charles K. Schiff Memorial Award (Top 3 $\%)$
06/2022	Provost's Research Fellowship (5000 dollars)
12/2019	Dean's List (Every semester)
09/2017	Patent of a new type of packing tool
SKILLS:	

Python, Pytorch, Tensorflow, Deep Learning, Java, JavaScript, HTML, CSS, SQL, Linux command, Typescript

### SERVICE

IEEE Transactions on Big Data Reviewer IEEE Transactions on Neural Networks and Learning Systems (TNNLS) Reviewer ICDM 2024 MLoG Workshop Reviewer TKDE 2023 Reviewer