#### Mufei Li

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#### **Education**

Georgia Institute of Technology

Ph.D., Machine Learning

New York University Shanghai

B.S., Honors Mathematics

Georgia, United States

Aug 2023 
Shanghai, China

Sep 2014 - May 2018

# **Professional Experience**

Software Development Engineer II

Amazon Web Services Shanghai AI Lab

Software Development Engineer I

Amazon Web Services Shanghai AI Lab

**Research Assistant** 

New York University Shanghai

Shanghai, China Jul 2020 - Jun 2023 Shanghai, China Feb 2019 - Jul 2020 Shanghai, China Jun 2018 - Feb 2019

## **Selected Publications**

- Rongzhe Wei, <u>Mufei Li</u>, Mohsen Ghassemi, Eleonora Kreačić, Yifan Li, Xiang Yue, Bo Li, Vamsi K.
   Potluru, Pan Li, Eli Chien, <u>Underestimated Privacy Risks for Minority Populations in Large Language Model Unlearning</u>, International Conference on Machine Learning (ICML), 2025.
- <u>Mufei Li\*</u>, Siqi Miao\*, Pan Li, **Simple is Effective: The Roles of Graphs and Large Language Models in Knowledge-Graph-Based Retrieval-Augmented Generation**, International Conference on Learning Representations (ICLR), 2025 (\*Equal contribution); also selected for oral presentation at ICLR 2025 workshop on Foundation Models in the Wild.
- Mufei Li, Viraj Shitole, Eli Chien, Changhai Man, Zhaodong Wang, Srinivas Sridharan, Ying Zhang, Tushar Krishna, Pan Li, LayerDAG: A Layerwise Autoregressive Diffusion Model for Directed Acyclic Graph Generation, International Conference on Learning Representations (ICLR) Spotlight (top 5.1%), 2025; also selected for spotlight presentation at ICLR 2025 workshop on "Will Synthetic Data Finally Solve the Data Access Problem?".
- Tengfei Ma, Xiang Song, Wen Tao, <u>Mufei Li</u>, Jiani Zhang, Xiaoqin Pan, Yijun Wang, Bosheng Song, Xiangxiang Zeng, **Towards Synergistic Path-based Explanations for Knowledge Graph Completion: Exploration and Evaluation**, International Conference on Learning Representations (ICLR), 2025.
- Eli Chien, <u>Mufei Li</u>, Anthony Aportela, Kerr Ding, Shuyi Jia, Supriyo Maji, Zhongyuan Zhao, Javier Duarte, Victor Fung, Cong Hao, Yunan Luo, Olgica Milenkovic, David Pan, Santiago Segarra, Pan Li,
   Opportunities and challenges of graph neural networks in electrical engineering, Nature Reviews Electrical Engineering, 2024.
- <u>Mufei Li</u>, Eleonora Kreačić, Vamsi K. Potluru, Pan Li, **GraphMaker: Can Diffusion Models Generate Large Attributed Graphs?**, Transactions on Machine Learning Research (TMLR), 2024.

- Fabio Broccatelli, Richard Trager, Michael Reutlinger, George Karypis, <u>Mufei Li</u>, Benchmarking Accuracy and Generalizability of Four Graph Neural Networks Using Large In Vitro ADME Datasets from Different Chemical Spaces, Molecular Informatics, 2022.
- Ziqi Chen, Bo Peng, Vassilis N. Ioannidis, <u>Mufei Li</u>, George Karypis, Xia Ning, **CTKG: A Knowledge Graph for Clinical Trials**, Scientific Reports, 2022.
- Fengqing Lu, <u>Mufei Li</u>, Xiaoping Min, Chunyan Li, Xiangxiang Zeng, **De novo generation of dual-target ligands using adversarial training and reinforcement learning**, Briefings in Bioinformatics, 2021.
- <u>Mufei Li</u>, Jinjing Zhou, Jiajing Hu, Wenxuan Fan, Yangkang Zhang, Yaxin Gu, George Karypis, **DGL-LifeSci: An Open-Source Toolkit for Deep Learning on Graphs in Life Science**, ACS Omega, 2021.
- Vassilis N. Ioannidis, Xiang Song, Saurav Manchanda, <u>Mufei Li</u>, Xiaoqin Pan, Da Zheng, Xia Ning, Xiangxiang Zeng, George Karypis, **DRKG - Drug Repurposing Knowledge Graph for Covid-19**, preprint, 2020.
- Minjie Wang, Da Zheng, Zihao Ye, Quan Gan, <u>Mufei Li</u>, Xiang Song, Jinjing Zhou, Chao Ma, Lingfan Yu, Yu Gai, Tianjun Xiao, Tong He, George Karypis, Jinyang Li, Zheng Zhang, **Deep graph library: A graph-centric, highly-performant package for graph neural networks**, arXiv, 2019.

#### **Honors and Awards**

- Georgia Tech ECE Fellowship
- Top Reviewer for NeurIPS 2024

## **Peer Review Service**

- Conference on Neural Information Processing Systems (NeurIPS), 2024 2025
- International Conference on Learning Representations (ICLR), 2025
- International Conference on Machine Learning (ICML), 2025
- IEEE Transactions on Pattern Analysis and Machine Intelligence (TPAMI), 2024
- Transactions on Machine Learning Research (TMLR), 2025
- ACM SIGKDD International Conference on Knowledge Discovery and Data Mining (KDD), 2024
- Learning on Graphs Conference (LoG), 2024
- Asian Conference on Machine Learning (ACML), 2024

## **Talks & Tutorials**

 <u>Mufei Li</u>, Fabio Broccatelli, Accelerating Drug Discovery with Multitask Graph Neural Networks, Nvidia GTC, 2021. • Zichen Wang, Vassilis N. Ioannidis, Huzefa Rangwala, Tatsuya Arai, Ryan Brand, <u>Mufei Li</u>, Yohei Nakayama, **Graph Neural Networks in Life Sciences: Opportunities and Solutions**, KDD tutorial, 2022.

# **Teaching Assistant**

• ECE 6254 Statistical Machine Learning