Kaiwen Dong

Research Scientist Phone: +1(217)607-9853 Al research Email: kaiwen_dong@intuit.com Intuit Inc. Homepage: https://barcavin.github.io/

Education

University of Notre Dame, Notre Dame, IN, US Aug 2021 - June 2025

Ph.D. in Computer Science and Engineering

Advisor: Prof. Nitesh V. Chawla (ACM & IEEE & AAAI & AAAS Fellow)

University of Illinois at Urbana-Champaign, Champaign, IL, US Aug 2016 - May 2018

Master of Science in Statistics

Sichuan University, Chengdu, China Aug 2012 - July 2016

Bachelor of Science in Mathematics

Research Interests and Applications

Graph Learning: enable machines to effectively and efficiently capture complex relationships within real-world data. **Deep Relational Learning:** advance representation learning of tabular data, especially for relational databases. Al applications: develop and deploy Al applications, including enterprise text-to-SQL, transaction categorization, and customer service monitoring.

Professional Experience

Senior AI Research Scientist June 2025 - Present

Intuit Inc.

Research Scientist Intern April 2024 - July 2024

Intuit Inc.

Aunalytics Inc.

Data Scientist June 2018 - July 2021

Graduate Research Assistant August 2022 - Present

University of Notre Dame

Graduate Teaching Assistant August 2021 - December 2021

University of Notre Dame

Publications [Google Scholar]

Selected Peer-Reviewed Publications

[S6] Transaction Categorization in QuickBooks with Relational Deep Learning

Kaiwen Dong, Xiang Gao, Ayan Acharya, Maria Kissa, Mauricio Flores, Nitesh V. Chawla, Kamalika

The European Conference on Machine Learning and Principles and Practice of Knowledge Discovery in

Databases, 2025 (ECML-PKDD'25)

[S5] Pure Message Passing Can Estimate Common Neighbor for Link Prediction

Kaiwen Dong, Zhichun Guo, Nitesh V. Chawla

The Conference on Neural Information Processing Systems, 2024 (Neurips'24)

[S4] FakeEdge: Alleviate Dataset Shift in Link Prediction

Kaiwen Dong, Yijun Tian, Zhichun Guo, Yang Yang, Nitesh V. Chawla

The Learning on Graphs Conference, 2022 (LoG'22)

[S3] An Optimized NL2SQL System for Enterprise Data Mart

Kaiwen Dong, Kai Lu, Xin Xia, David Cieslak, Nitesh V. Chawla

The European Conference on Machine Learning and Principles and Practice of Knowledge Discovery in

Databases, 2021 (ECML PKDD'21)

[S2] You do not have to train Graph Neural Networks at all on text-attributed graphs

Kaiwen Dong, Zhichun Guo, Nitesh V. Chawla

International Joint Conference on Neural Networks, 2025 (IJCNN'25)

[S1] Heterogeneous Graph Masked Autoencoders

Yijun Tian, Kaiwen Dong, Chunhui Zhang, Chuxu Zhang, Nitesh V. Chawla

The AAAI Conference on Artificial Intelligence, 2023 (AAAI'23)

Preprints and Under Submissions

[P4] CORE: Data Augmentation for Link Prediction via Information Bottleneck

Kaiwen Dong, Zhichun Guo, Nitesh V. Chawla

Under Submission (TKDD)

[P3] Universal Link Predictor By In-Context Learning on Graphs

Kaiwen Dong, Haitao Mao, Zhichun Guo, Nitesh V. Chawla

Under Submission, 2025 (TMLR)

[P2] Node Duplication Improves Cold-start Link Prediction

Zhichun Guo, Tong Zhao, Yozen Liu, Kaiwen Dong, William Shiao, Mingxuan Ju, Neil Shah, Nitesh

V. Chawla

Under Submission, 2025 (TMLR)

[P1] MolX: Enhancing Large Language Models for Molecular Learning with A Multi-Modal Extension

Le Huy Khiem, Zhichun Guo, Kaiwen Dong, Xiaobao Huang, Bozhao Nan, Roshni Iyer, Xiangliang

Zhang, Olaf Wiest, Wei Wang, Nitesh V. Chawla

Under Submission, 2025 (AAAI'25)

Professional Services

Conference Reviewer	
International Conference on Learning Representations (ICLR)	2025
International Conference on Machine Learning (ICML)	2025
Neural Information Processing Systems (NeurIPS)	2024, 2025
SIGKDD Conference on Knowledge Discovery and Data Mining (KDD)	2024, 2025
Conference on Information and Knowledge Management (CIKM)	2024
International Conference on Artificial Intelligence and Statistics (AISTATS)	2025
Journal Invited Reviewer	
ACM Transactions on Knowledge Discovery from Data (TKDD)	2023, 2025
Transactions on Machine Learning Research (TMLR)	2025

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