# Xixi Wu

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# SHORT BIO

Xixi Wu is a first-year Ph.D. student at The Chinese University of Hong Kong. She received her B.S. and M.S. in Computer Science from Fudan University in 2021 and 2024, respectively.

Her research interests lie in the intersection of **Graph Learning and Large Language Models (LLMs)**. Specifically, she focuses on integrating Graph Learning with LLMs to enhance their reasoning and planning capabilities in graph-related applications, such as task planning in autonomous agents. She also has interests in **Data Mining**, with a focus on topics such as community detection, recommender systems, etc.

#### **EDUCATION**

#### • The Chinese University of Hong Kong

Aug. 2024 -

Ph.D. in Department of Systems Engineering and Engineering Management

Hong Kong SAR

- Advisor: Prof. Hong Cheng, Laboratory: Database Group @ CUHK
- Hong Kong PhD Fellowship

• Fudan University

Sept. 2021 - Jun. 2024 Shanghai, China

- M.S. in Computer Science
  Advisors: **Prof. Yangyong Zhu** and **Prof. Yun Xiong**
- National Scholarship, Outstanding Graduate Student in Shanghai
- Fudan University

Sept. 2017 - Jun. 2021

B.S. in Computer Science

Shanghai, China

#### SELECTED PUBLICATIONS

LLM=LARGE LANGUAGE MODELS, DM=DATA MINING, RS=RECOMMENDER SYSTEMS

[\*: Equal Contribution, ¶: Students I Mentored]

#### [LLM] Can Graph Learning Improve Planning in LLM-based Agents?

<u>Xixi Wu</u>\*, Yifei Shen\*, Caihua Shan, Kaitao Song, Siwei Wang, Bohang Zhang, Jiarui Feng, Hong Cheng, Wei Chen, Yun Xiong, and Dongsheng Li.

Main Track Long Paper. In NeurIPS 2024. 100+ GitHub Stars

# [DM] ProCom: A Few-shot Targeted Community Detection Algorithm.

<u>Xixi Wu</u>, Kaiyu Xiong, Yun Xiong, Xiaoxin He, Yao Zhang, Yizhu Jiao, and Jiawei Zhang. Research Track Long Paper. In *KDD* 2024.

#### [RS] ConsRec: Learning Consensus Behind Interactions for Group Recommendation.

<u>Xixi Wu</u>, Yun Xiong, Yao Zhang, Yizhu Jiao, Jiawei Zhang, Yangyong Zhu, and Philip S. Yu. Research Track Long Paper. In *WWW* 2023. *Oral* 

#### [RS] Dual Intents Graph Modeling for User-centric Group Discovery.

<u>Xixi Wu</u>, Yun Xiong, Yao Zhang, Yizhu Jiao, and Jiawei Zhang. Research Track Long Paper. In *CIKM* 2023.

## [DM] CLARE: A Semi-supervised Community Detection Algorithm.

<u>Xixi Wu</u>, Yun Xiong, Yao Zhang, Yizhu Jiao, Caihua Shan, Yiheng Sun, Yangyong Zhu, and Philip S. Yu. Research Track Long Paper. In *KDD* 2022. 30+ *GitHub Stars*, ~ 40 *Citations* 

#### [DM] DDIPrompt: Drug-Drug Interaction Event Prediction based on Graph Prompt Learning.

Yingying Wang<sup>¶</sup>, Yun Xiong, <u>Xixi Wu</u>, Xiangguo Sun, and Jiawei Zhang. Research Track Long Paper. In *CIKM* 2024.

# [DM] Towards Adaptive Neighborhood for Advancing Temporal Interaction Graph Modeling.

Siwei Zhang<sup>¶</sup>, Xi Chen, Yun Xiong, <u>Xixi Wu</u>, Yao Zhang, Yongrui Fu, Yinglong Zhao, and Jiawei Zhang. Research Track Long Paper. In *KDD* 2024.

# [DM] Graph Prompt Learning: A Comprehensive Survey and Beyond.

Xiangguo Sun, Jiawen Zhang, <u>Xixi Wu</u>, Hong Cheng, Yun Xiong, and Jia Li. Survey Paper. In *arXiv Pre-print* 2023. 300+ *GitHub Stars*, 40+ *Citations* 

# **INTERNSHIP EXPERIENCE**

• Microsoft Research Asia [\( \bar{\phi} \)]

Research Intern @ Shanghai AI/ML Group

Feb. 2024 - Jun. 2024 Shanghai, China

- o Mentors: Dr. Yifei Shen and Dr. Caihua Shan
- Conducted research on graph learning to enhance task planning, systematically applying various graph learning methods such as graph prompts, graphsearch, graph language models, etc, to improve the planning capabilities of language agents.
- Designed a GNN-based method that demonstrates SOTA performance, strong efficiency, and is orthogonal to LLM fine-tuning and prompt engineering for task planning in language agents.

# **ACADEMIC SERVICE**

- Conference PC Member/Reviewer: Graph Foundation Model Workshop@WWW 2024, NeurIPS 2024, ICLR 2025, KDD 2024&2025, ICML 2025
- Journal Reviewer: IEEE Transactions on Knowledge and Data Engineering (TKDE)

# **SELECTED AWARDS**

• NeurIPS Top Reviewer (Top 0.8%)	2024
Hong Kong PhD Fellowship, Hong Kong SAR	2024
• National Scholarship for Graduate Student (Top 1%), Ministry of Education, China	2022 & 2023
WWW 2023 Student Travel Award	2023
• 2nd Class Scholarship for Outstanding Student, Fudan University	2018 & 2021
• 2nd Prize of Undergraduate Mathematical Contest in Modeling, Shanghai, China	2019
• 1st Prize in National Olympiad in Mathematics in Provinces, Jiangsu, China	2016