Fenglin Yu

mikukuovo@gmail.com · (+86) 18841166418 / (+1) 5309793651

Introduction

I am currently an undergraduate student at Wuhan University and working as a remote research assistant in the research group of Professor Tang Jing in Hong Kong University of Science and Technology to conduct research on **graph machine learning** and **self-supervised learning**. In July-August 2024, I will go to University of California, Davis to participate in Professor Yubei Chen's research group to conduct **unsupervised learning** and **world model** research. I hope to have an internship in a company related to my research interests after the summer research.

Education

Wuhan University, Wuhan, China Sep. 2021 – July. 2025

B.E. in Computer Science (CS) of **Hongyi Honor College**
GPA: 3.63/4.0 Average Score: 87
Teaching Assistant for the **Data Structures** course
Lei Jun Computer Innovation and Development **Scholarship**

Publication

Learning Masked Graph Autoencoders for Missing Node Features Imputation by Feature Propagation

Pending Submission Co–first Author

Pending to Submit to International Conference on Knowledge Discovery and Data Mining (**ACM SIGKDD 2025**).
Main Contribution: Introduces a novel approach combining feature propagation and a masked graph autoencoder to improve the performance of Graph Neural Networks when node features are missing.

YOLO, Faster R-CNN, and SSD for cloud detection Sep 30, 2023

Accepted First Author

Accepted by International Conference on Machine Learning and Automation (**CONF-MLA 2023**).
Main Contribution: Applying different models for cloud detection and build a dataset for cloud detection.

Experience

Remote Research Assistant at Hong Kong University of Science and Technology

Hong Kong, China Mar. 2024 – Now

Graph Neural Networks, Self-Supervised Learning, Data Mining Research

Supervisor: Prof. Jing Tang

Brief introduction: The performance of Graph Neural Networks (**GNN**) significantly decreases when **node features** are **missing**, which is a common issue in real-world applications such as social networks where user attributes may be partly private. To address this challenge, we introduces a novel approach combining feature propagation and a masked **graph autoencoder** that excels in both transductive and inductive settings. Various experiments are conducted on six public datasets and an additional dataset collected from records of voyages with naturally missing features to validate the performance of our approach. The results demonstrate that model outperforms the state-of-the-art methods, proving its effectiveness in attribute graph analysis tasks with missing features.

Internship at Huawei Wuhan Research Institute
Wuhan, China Jan. 2024 – Mar. 2024

Machine Learning with Graphs, Graph Theory, Data Mining Intern

Supervisor: Senior Engineer Jinyao Xie

Brief introduction: The layout of network structure diagram has always been a problem that has not been well solved, especially for the layout problem in specific business scenarios. Since some network devices do not have labels, the key lies in correctly **identifying** different types of **network source nodes**. We introduce the **graph machine learning** method and consider that network structure diagram has a large number of access rings. Combined with the **classical graph algorithm**, different types of nodes are well identified, and then hierarchical layout is carried out according to the types of nodes. Genetic algorithm is used to reduce the cross edges between layers, which solves this problem to a large extent.

Teaching Assistant at Whuhan University
Wuhan, China Sep. 2023 – Jan. 2024

Data Structures TA

Supervisor: Prof. Jingjue Jiang

PROJECTS

Singularity Odyssey Apr. 2024 – May. 2024

Software Engineering, Large Language Models Group Leader

Supervisor: Prof. Chunxiang Wu

Brief introduction: The project "Singularity Odyssey" is an integrated application that combines calendar, large language models, and personal memo functionalities.
Project Link: https://github.com/MikukuOvO/Singularity-Odyssey

AWARDS

National Second Prize, China University Computer Competition - Team programming ladder Competition May. 2023

National First Prize, The second China Computer Federation (CCF) 'Sinan Cup' Quantum Computing Programming Challenge University group May. 2023

Silver Medal, International Collegiate Programming Contest (ACM-ICPC) **Asia** Hangzhou **Regional Contest** Dec. 2022

Silver Medal, International Collegiate Programming Contest (ACM-ICPC) **Asia** Xi'an **Regional Contest** Nov. 2022

Silver Medal, China Collegiate Programming Contest Weihai Contest Nov. 2022

Gold Medal, China Collegiate Programming Contest Hubei provincial Contest May. 2022

SKILLS

- Programming Languages: C++, Python, Pytorch, Java Script
- Platform: MacOS/Windows/Linux
- TOEFL iBT: 93 (Best Score: 96)
- Configure the server for Deep Learning, which can be access remotely

MISCELLANEOUS

- GitHub: https://github.com/MikukuOvO
- Personal Website: https://mikukuovo.github.io/

- Being in Hongyi College, which is an honor college in Wuhan University
- **Contributing problems** and presiding over the closing ceremony in Hubei Collegiate Program Contest in 2023