Wang "Melvin" Ming

BSc (Hons) in Computer Science

The Hong Kong Polytechnic University, Hong Kong Personal Website: https://melvin-king.github.io

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GitHub Profile
ORCID

in LinkedIn Profile

EDUCATION

•The Hong Kong Polytechnic University, Hong Kong

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Graduated with Second Class Honours Division I

•University of Cambridge

2022

2020-2024

Mathematics for Engineers Programme

Bachelor of Science in Computer Science

Certificate Granted

•Chengdu No. 7 High School

2017-2020

 $High\ school\ diploma$

Graduated

EXPERIENCE

•Department of Computing, PolyU

June 2023 - September 2024

Research Assistant (Full-time)

Hong Kong

- Temporal Graph Neural Network (TGNN), Link Prediction and Node Classification
- Model Testing, Evaluation Baseline testing and Benchmarking

•Code for Asia Ltd.

June-August, 2023

Student internship Singapore

- Front-end Development
- AI Problem-solving Architect

•Department of Building and Real Estate, PolyU

April 2023- June 2024

Research Assistant (Part-time)

Hong Kong

- LLM-driven Online Social Network Analysis
- Data Retrieval, Large Language Model, Social Network Analysis, Paper Completion

SELECTED PUBLICATIONS

•(Published) R. Ma, G. Q. Shen, P. Lou and M. Wang, "Large Language Model-based data-driven framework for digital transformation in construction industry" in 2024 Conference on ASCE Computing in Civil Engineering (i3CE), Pittsburgh, United States

Keywords: Large Language Model, Digital Transformation, Engineering Management

•(Under 2nd Review) M. Wang, R. Ma, G. Q. Shen and J. Xue, "How Large Language Model Empowers Online Public Engagement Analysis for Mega Infrastructure Projects: cases in Hong Kong" submitted to IEEE Transactions in Engineering Management (TEM), 2024

Keywords: Large Language Model, Social Network Analysis, Public Engagement, Mega Projects

PERSONAL PROJECTS

•Robotic-guided Self-help Telerehabilitation in Metaverse for stroke patients

March - May 2023

Aims to build a VR Metaverse system for elderly rehabilitation training.

- Tools & technologies used: Leap Motion, Unity, UART for data transmission
- The forearm wearable device is developed by PolyU BRE

•LLM-empowered Family Healthcare Management System

January - March 2024

A smarter family healthcare system with personalized medical inquiry and app operation via word inputs.

- Tools & technologies used: Python, Java, LLM, Prompt Engineering

TECHNICAL SKILLS AND INTERESTS

Languages: English, Mandarin, Cantonese

Developer Tools: PyCharm, VSCode, IntelliJ IDEA

Programming Languages: C/C++, Java, Javascript, Python, R

Libraries: Torch, Tensorflow, NetworkX, Sklearn, Pandas, Matplotlib, Seaborn

Operating Systems: Windows, Linux

Areas of Interest: GNN, LLM, Knowledge Graph, Social Network Analysis

Positions of Responsibility

•Student Ambassador, Amazon Web Services(AWS)

•First Aid Brigade Member, Hong Kong St. John Ambulance	July 2024-Present
ACHIEVEMENTS	
•Certificate of Outstanding Contribution, AWS Student Ambassador Programme	2023
•Excellent Teaching Team, STEM Education for Children, PolyU Service Learning Progra	amme 2022
•3rd Prize, National Olympics for Informatics in Provinces (NOIP), China	2018

2023-2024