Wang "Melvin" Ming

MSc in Information Engineering
The Chinese University of Hong Kong, Hong Kong
⊕ Personal Website: https://melvin-king.github.io

☏ +852-94965486
✉ cd.melvin.wang@outlook.com
⌨ GitHub Profile: Melvin-King
ⓘ ORCID: 0009-0002-2164-406X
▣ LinkedIn Profile

EDUCATION

•**The Chinese University of Hong Kong, Hong Kong** — *2025-2026*
Master of Science in Information Engineering — Ongoing

•**The Hong Kong Polytechnic University, Hong Kong** — *2020-2024*
Bachelor of Science in Computer Science — Graduated with Second Class Honours Division I

•**University of Cambridge** — *2022*
Mathematics for Engineers Programme — Certificate Granted

•**Chengdu No. 7 High School** — *2017-2020*
High school diploma — Graduated

EXPERIENCE

•**Department of Information Engineering, CUHK** — *September 2025 - present*
Research Project — Hong Kong
  – MLLM Reasoning for Next Generation live-streaming Digital Human
  – QWen3-Omini + Wan-S2V Pipeline Construction, Baseline Deployment

•**ARISE Lab, Department of Computer Science and Engineering, CUHK** — *March 2025 - present*
Co-researcher — Hong Kong
  – Front-end Coding intelligence analysis for Multimodal LLMs Baseline
  – Data Collection and Processing, Metrics, Evaluation, Benchmarking
  – Building AI Agent system as Metareviewer for an academic paper review
  – Agentic AI, MLLM, RAG, MoE

•**Department of Computing, PolyU** — *June 2024 - 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

PUBLICATIONS & PREPRINTS

•**J. Xiao, M. Wang, M. H. Lam, Y. Wan, J. Liu, Y. Huo and M. R. Lyu, "DesignBench: A Comprehensive Benchmark for MLLM-based Front-end Code Generation", in arXiv preprint, 2025, doi: 10.48550/arXiv.2506.06251**
Keywords: MLLM, Code Inteligence, Software Engineering, Benchmark

•**M. Wang, R. Ma, G. Q. Shen and J. Xue, "How Large Language Model Empowers the Analysis of Online Public Engagement for Mega Infrastructure Projects: cases in Hong Kong", in IEEE Transactions in Engineering Management (IEEE-TEM), 2025, doi: 10.1109/TEM.2025.3553595**
Keywords: Large Language Model, Social Network Analysis, Public Engagement, Mega Projects

•**R. Ma, G. Q. Shen, P. Lou and M. Wang, "Large Language Model-based data-driven framework for digital transformation in construction industry," in ASCE International Conference on Computing in Civil Engineering 2024 (i3CE), doi: 10.1061/9780784486115.012**
Keywords: Large Language Model, Digital Transformation, Engineering Management

Projects

•Data vs Pipeline Parallelism in LLM Training *October 2025*

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

– Implements distributed training methods, including data parallelism and pipeline parallelism across multiple GPUs.

•Robotic-guided Self-help Rehabilitation 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: MLLM, Software Engineering, Agentic AI, Social Network Analysis

Positions of Responsibility

•Reviewer, IEEE Transactions in Engineering Management (IEEE-TEM) *May 2025-October 2025*

•Student Ambassador, Amazon Web Services(AWS) *2023-2024*

•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 Programme *2022*

•3rd Prize, National Olympics for Informatics in Provinces (NOIP), China *2018*