

Chal (LH) SHUM

SDE | RE | MSc., AIBD @ polyu.edu.hk/comp/



linkedin.com/in/lu-lhusim/



github.com/Cma-png



[my website](#)

PROFILE SUMMARY

Junior AI Software Developer pursuing MSc in AI and Big Data Computing at Hong Kong Polytechnic University with a strong background in Python, C++, AWS, and LLM integration. Experienced in developing scalable applications and querying systems, specializing in natural language processing and VectorDB. Proven ability to enhance workflow automation and optimize system performance across various industries

EDUCATIONS

Master of Science in Artificial Intelligence and Big Data Computing 09/2023 – Expected 05/2025

The Hong Kong Polytechnic University

- Dissertation Advisor: Prof. PATHAK Ajay Kumar
- Dissertation Topic: Fake Identification, Diffusion Models
- Relevant Course: Natural Language Processing, Computer Vision and Image Processing, Machine Learning and Data Analytics, Software Engineering and Development

Honors Bachelor of Business Administration in Business Intelligence and Analytics (2:1) 09/2021 – 07/2023

Hong Kong Metropolitan University

Associate Degree in Business (Accounting) 09/2019 – 08/2021

Hong Kong Community College, The Hong Kong Polytechnic University

EXPERIENCES

AI Software Developer Intern, Backend | *Python / JavaScript / C++ / Go / Linux /* 12/2023 – Present
CUDA / AWS / VectorDB / MySQL / Docker

SWIVEL Software

Hybrid · Hong Kong

- Developed a LLM domain application using large language models from AWS via SDK, integrated with a MSSQL database and its corresponding graphical user interface using Flask;
- Conducted multithread pool testing and asynchronous programming, enabling the application to handle 50% more concurrent users

Part-Time Research Engineer | *Python / FastAPI / Pinecone / InfluxDB* 06/2024 – Present
/ RAG

The Hong Kong Polytechnic University, Dept. of BEEE

Hybrid · Hong Kong

- Developed and refined querying systems for building HVAC data using Large Language Models (LLMs), focusing on natural language processing and integration with Vector Database;
- Implemented Retrieval-Augmented Generation (RAG) to enhance LLM capabilities in interpreting and responding to domain-specific queries, such as those related to the Brick model and HVAC system performance

Assoc. Business & System Analysis Intern | *JavaScript / RESTful API / Postman* 02/2023 – 06/2023
/ Retool / MongoDB

ProMEX

Hybrid · Hong Kong

- Performed API Platform actions with human-in-the-loop processing, resulting in a 20% increase in workflow automation efficiency

Data Solution Intern Jun 2022 – July 2022

Kuehne + Nagel

- Identified charge fee patterns in the APAC region using SKlearn, leading to a 66% improvement in sea route quotation strategy

SIDE PROJECT

BookStore REST API project <i>Java, Spring Boot, Postman</i>	Research-Paper-Q&A <i>Python, Docker, Streamlit</i>	Text-to-Code <i>Python, MSSQL</i>	Meditation IOS APP <i>Swift, Core ML, TypeScript</i>	Text-to-Image <i>Python, Diffusion</i>
--	---	---	--	--