

## EDUCATION

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- **The Hong Kong Polytechnic University (PolyU)**  
*PhD in Computing* *Sept 2024 - June 2028*
  - **Supervisor:** Dr. Chen Jason Zhang, Prof. Qing Li
  - **Research Interest:** Large Language Models, Conversational Data Mining, Virtual Assets
  - **Teaching Experience:** Teaching Assistant for “Emerging Topic in FinTech, AI and Big Data”
- **The University of Nottingham**  
*BSc (Hons) Mathematics and Data Science* *Sept 2021 - June 2024*
  - **Grade:** First Class Honours (GPA: 3.98/4)
  - **Achievement:** Faculty Best Student Award; Dean’s Excellence Scholarship Award
  - **Core Modules:** Machine Learning, Optimization, Probability and Statistical Models

## RESEARCH EXPERIENCE

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- **HashKey Exchange** Hong Kong, China  
*Principal Researcher in AI* *March 2023 - Present*
  - **Research Focus:** Large Language Models, Quantitative Trading, Regulatory Tech
  - Led the *Joint Laboratory for AI and Virtual Assets* to explore emerging technologies for Web3.
  - Delivered regular AI seminars to HashKey employees to enhance internal workflow efficiency.
  - Drafted articles for publication in major Hong Kong newspapers and recorded podcasts for Web3 audiences.
- **AI Group, WeBank** Shenzhen, China  
*NLP Researcher* *June 2024 - June 2025*
  - **Research Focus:** Large Language Models, Dialogue Data Mining and Customer Service Support
  - Carried out large-scale industrial data processing and modeling.
  - Developed customer service chatbots for banking service using Large Language Models.
  - Experimented with **LLMs-in-the-loop** techniques for the future applications of LLMs.

## PROJECT EXPERIENCE

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- **Conversational AI Engineering, AI Group, WeBank** June 2024 - Sep 2024
  - Developed and deployed Next-Generation Conversational AI for WeBank, enhancing customer service experience and business intelligence with LLMs and RAG for reduced hallucination and improved response accuracy.
  - Implemented zero-code, three-step generation of conversational robots, supporting batch uploading of various file formats and automatic document parsing.
  - Authored and presented four research papers on agent persona consistency and customer service data mining.
- **Strategic Analyst, Luckin Coffee Inc.** June 2023 - September 2023
  - Conducted desk research on the Chinese coffee market to provide strategic insights for informed decision-making.
  - Forecasted Singapore market behavior over the next five years to identify optimal overseas expansion strategies.
  - Extracted and analyzed large datasets (sales records, social media performance, etc.) using Python and web scraping techniques, presenting results through information visualization dashboards.

## SELECTED PUBLICATIONS

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- **Mengze Hong**, HashKey Exchange, “大模型时代的AI与Web3生态”, 文汇报 2025
- **Mengze Hong**, HashKey Exchange, “人工智能赋能下的加密货币量化交易分析”, 文汇报 2025
- **Mengze Hong**, Wailing Ng, Chen Jason Zhang, Yifei Wang, Di Jiang, Yuanfeng Song, “LLM-in-the-Loop: Replicating Human Insight with LLMs for Better Machine Learning Applications”, 2025
- **Mengze Hong**, Wailing Ng, Chen Jason Zhang, Di Jiang, “Dial-In LLM: Dial-In LLM: Human-Aligned LLM-in-the-loop Intent Clustering for Customer Service Dialogues”, 2025
- **Mengze Hong**, Chen Jason Zhang, Di Jiang, Yuanqin He, “Augmenting Compliance Guaranteed Conversational AI: Context-Aware Knowledge Base Expansion with LLMs and Combinatorial Optimization”, 2025
- **Mengze Hong**, Chen Jason Zhang, Chaotao Chen, Rongzhong Lian, Di Jiang, “Dialogue Language Model with Large-Scale Persona Data Engineering”, NAACL 2025
- **Mengze Hong**, Chen Jason Zhang, Lingxiao Yang, Yuanfeng Song, Di Jiang, “InfantCryNet: A Data-driven Framework for Intelligent Analysis of Infant Cries”, ACML 2024