

HU Yaoyuan (Joe)

(86) 17603962363 | 1155173899@link.cuhk.edu.hk | huyaoyuanqaq@gmail.com
www.linkedin.com/in/yaoyuan-hu-2a2126297

EDUCATION

THE CHINESE UNIVERSITY OF HONG KONG

Hong Kong SAR

B.Sc. in Computer Science

Sep 2021 - Aug 2026 (Expected)

- Major: Computer Science
- Concentration: Deep Learning, Multimodal Large Language Model, Data Analytics
- CGPA: 3.5
- Relevant coursework: Programming Languages in C/Java/Python, Data Structures, Fundamentals of AI, Fundamentals of Machine Learning, Software Engineering, Introduction to Database Systems, Design and Analysis of Algorithms, Formal Languages and Automata Theory, Statistics for Engineers, Introduction to Operating Systems.

RESEARCH EXPERIENCE

THE CHINESE UNIVERSITY OF HONG KONG

Hong Kong SAR

Natural Language and Formal Language Reasoning Enhancement for Lightweight Model

May 2025 – Aug 2025

- Developed FormalMath-Cross, a novel framework enabling 1.5B-parameter models to perform automated theorem proving in Lean4 via dual-modal reasoning synergy.
- Engineered a dual stage fine-tuning pipeline:
Stage 1: Adapted Qwen2.5-Math-1.5B to Lean4 syntax using DeepSeek-Prover-V1 (QLoRA: 0.1% new params, r=16)
Stage 2: Aligned natural language reasoning with formal proofs via Goedel-Prover-annotated MiniF2F data
- Achieved 21.3% formal proof accuracy on MiniF2F benchmark (vs. 0% baseline), reducing candidate proofs by 4× vs. 7B models.

WORK EXPERIENCE

THAI WAH PUBLIC COMPANY LIMITED.

Bangkok, Thailand

Strategy, Sustainability and Innovation Group – Data Analytics and Strategy Internship

Jun 2024 – Dec 2024

- Applied the long short-term memory (LSTM) model to accurately predict the prices of various commodities to support the company's decision-making in operations and strategic planning.
- Built a web application to analyze product composition and effects of additives, etc. on product properties with Principal Component Analysis (PCA) and Partial Least Squares Regression (PLSR).
- Finetuned GPT4o to build a chatbot for the company that can help to answer relevant questions and deploy it to Line official account.

QI-AN XIN TECHNOLOGY GROUP INC.

Chengdu, China

FISU World University Games Cyber Security Department – Data Analysis Internship

Jul 2023 - Aug 2023

- Gathered information on recent data leakage and trafficking activities on the Internet.
- Aggregated sources of data and classified them by relevance to the project to make the team work more prioritized and more organized.
- Participated in writing daily summary reports of the team's work, provided feedback on progress and increased the speed of the entire work reporting process by approximately 40%.

LEADERSHIP EXPERIENCE / OTHER ACHIEVEMENTS

Engineering Leadership, Innovation, Technology and Entrepreneurship Stream (Elite Stream)

Hong Kong SAR

Member

Sep 2021 – Jun 2024

- Took additional challenging coursework and invaluable extra-curricular activities with excellent academic performance.

Wong Lee Sau Ying Memorial Scholarship 2023/2024

Hong Kong SAR

Awardee

Apr 2024

- Had good academic performance and made a significant contribution to the college.

CU HUB – A Social Media Software for University Students

Hong Kong SAR

Project Programmer

Jan 2023 - Apr 2023

- Responsible for the front-end development of all the administrator's interfaces and the user's profile page in a team of five.

LANGUAGES, SKILLS & INTERESTS

Languages: Mandarin (Native), English (Fluent), Cantonese (Elementary).

IT Skills: C, Java, Python, PyTorch, JavaScript, React.js, SQL, MySQL, Microsoft Office.

Interests: Listen to music, Write music reviews.