

Cheng Ho Ming

HKU BASc(AppliedAI) Year 3 • Email: 123erichappy123@gmail.com • Phone: +852-94998184

Website: eric15342335.github.io • LinkedIn: eric15342335 • GitHub: eric15342335

Professional Experience

Radio Television Hong Kong (RTHK)

Summer Intern, Engineering Section (Broadcast Systems), Production Services Division

Hong Kong

Jun 2025 – Aug 2025

- Researched the feasibility of correcting Cantonese subtitle transcription errors with **Streamlit** and **PyCantonese**, and developed a demo system for internal evaluation, identifying potential to reduce manual editing effort based on sample data.
- Developed a Python-based video post-processing tool using **OpenCV** and **MediaPipe** for a visitor workshop; enabled a one-button automated workflow ("START") to record, save, add effects, and playback, generating hundreds of unique showcase videos.
- Researched and evaluated webcam-based motion capture tools for 3D model animation; selected and tested a top free solution (System Animator) and validated 3D asset workflow (FBX to VRM conversion) using **Blender** and **Unreal Engine**.

The University of Hong Kong

Part-Time, Student Research Assistant

Hong Kong

May 2025 – Jun 2025

- Curated a specialized dataset of **200+ scientific articles** for a linguistic analysis chatbot under principal investigator Dr. Lisa Cheung.

Part-Time, Student Teaching Assistant

Jan 2025 – Apr 2025

- Provided targeted **C++/Linux support** in small-group sessions, clarifying complex topics like memory management and pointers.

InspireLab Limited

Summer Intern, Embedded Software Developer

Hong Kong

May 2024 – Aug 2024

- Engineered a functional **RISC-V** microcontroller STEM toolkit, integrating 5+ open-source libraries and controlling over **64+ I/O components**.
- Developed a C-based, API-level hardware simulator to decouple software from hardware, enabling rapid parallel testing and iteration.

Project Experience

alphahku.page

July 2025 – Aug 2025

- Developed a static website for a student organization using **Next.js**, shadcn/ui, Tailwind CSS, and deployed on Vercel.

Reproducing RealFill (a research paper on SIGGRAPH 2024)

Mar 2025 – May 2025

- Implemented and benchmarked a custom two-stage refinement pipeline based on LoFTR by integrating and modifying RealFill code in Jupyter Notebook.

Stock Market Simulator (C++ Terminal Game)

Apr 2024

- Led a team of 5 in designing software modules and managing development tasks for a C++ terminal-based game.
- Enhanced developer experience and collaboration by implementing **CI/CD pipelines** on 3 platforms using GitHub Actions, automating compilation and code checks for all pull requests.

PyInstaller (Open Source Development)

Jul 2021 – Nov 2021

- Contributed **15+** custom PyInstaller hooks (e.g., for Kivy), all merged and adopted upstream in 2021, improving library compatibility and developer experience for the open-source project.

Education

The University of Hong Kong

Bachelor of Arts and Science in Applied Artificial Intelligence (BASc(AppliedAI))

Hong Kong

Sep 2023 – Jul 2027 (Expected)

- **CGPA:** 3.56/4.30 **Second Major:** Computer Science

King's College

Hong Kong Diploma of Secondary Education

Hong Kong

Sep 2017 – Aug 2023

- Best 5 subjects: Physics (5*), Mathematics (5*), ICT (5*), Chinese (5), English (5)
- King's College Harmonica Band (KCHB), 2021 Treble II Section Leader

Skills

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

Programming: Python (Data Science), C/C++, Java, MySQL, MongoDB

Web Development: React, Next, Express, Tailwind CSS

Tools: Linux, Git, CI/CD, Docker, L^AT_EX

Cloud: Google Cloud Platform (Compute Engine), Vercel