

CHAN YAT FU JACKY

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Education

The University of Hong Kong

BEng in Computer Engineering

Sept 2019 – Now

Advanced Courses GPA 3.46

- 2022-2023 Year GPA: 3.85 (12 courses)
- **Winner (Top 11 out of 136 projects)** – Final Year Project Competition
- **Finalist (Top 6)** – Generative AI Hackathon for Social Good
- A+ in Operating Systems, Digital System Design, Probabilistic Systems Analysis
- A/A- in **OOP and Java**, Computer and communication networks, Introduction to database management systems, Machine learning, Artificial intelligence, Algorithm design, Integrated design project

Language Qualifications

- **DSE English: 5* in Speaking**, 5 in Writing | **IELTS** (2019): **8.5 in Reading**, 7.5 in Listening

Work Experience

Software Developer – Novbee

June 2023 – January 2024

Part-time Software Developer

August 2023 – January 2024

- Enhanced the company's digital presence by developing the company website using **React/Next.js**, and **FastAPI**.
- Conceived and executed the backend infrastructure and database schema for the company.
- Leveraged knowledge in **React**, **TypeScript**, **Next.js**, **FastAPI**, **PostgreSQL**, **GraphQL**, **AWS**, and **Azure**.

Software Developer Intern

June 2023 – August 2023

- Boosted data processing efficiency by developing an automated processing pipeline with **Python** and **Selenium**.
- Engineered a Singing Voice Synthesis model utilizing **PyTorch** in **Linux** environment.
- Leveraged knowledge in **Python**, **PyTorch**, **Pandas**, **NumPy**, **Bash Script**, **Docker**, and **Selenium**.

Digital Marketing and Data Analytics Intern – Homie Living

May 2022 – August 2022

- Increased the open and click rates of email campaigns by **22% and 17%** respectively by improving the content.
- Enhanced the Google search ranking of **10 keywords** to the **top 3 positions** by refining SEO strategies.

Projects

MIDI Editor (React): A versatile and customizable music workstation

[GitHub Repo](#)

- Developed a **React** library for creating and editing MIDI files with a highly interactive interface.
- Showcased the library's capabilities by implementing a singing voice synthesizer in **Next.js** using this library.
- Incorporated essential features such as **clipboard**, **undo/redo**, **import/export**, and **lyric input**.
- Demo: <https://react-midi-editor-demo.vercel.app> | Utilised: TypeScript, React, Next.js, Jest/RTL, SCSS.

Tic-tac-toe (Java): A multi-player game utilizing socket and multi-threading

[GitHub Repo](#)

- Integrated **socket programming**, **multi-threading** to manage game state and user interactions.
- Implemented a dynamic **Java Swing** GUI for real-time game status updates and player interactions.
- Improved game stability by handling **network disruptions** and **player disconnections** effectively.

Hooks (React): A fully tested React hooks and TypeScript utilities library

[GitHub Repo](#)

- Designed a comprehensive collection of modular **React** hooks and **TypeScript** utilities.
- Achieved 99% test coverage using **Jest** and **React Testing Library**.
- Integrated **GitHub Actions** for continuous integration and deployment.
- Utilised: TypeScript, React, Jest/RTL, Github Actions, Rollup.

Folded (Java): A interactive GUI card game

[GitHub Repo](#)

- Developed a **Java-based** card game using Swing, managing shuffling, betting, and rule enforcement.
- Created interactive GUI elements for card replacement and result evaluation.

ICMS (TypeScript/Python): A comprehensive course management dashboard

[GitHub Repo](#)

- Integrated a **facial recognition** component for enhanced security during login using **OpenCV**.
- Utilised: TypeScript, Python, FastAPI, Solid.js, TailwindCSS, MySQL, OpenCV.

Technical Skills

Languages

(proficient): TypeScript/JavaScript, Java, Python, Shell Script, HTML, SCSS, LaTeX
(familiar): Haskell, PHP, C++

Frameworks & Tools

Next.js, React, Solid.js, Node.js, Express.js, FastAPI, PyTorch, TailwindCSS, Selenium, Jest, React Testing Library, OpenCV

Cloud & Databases

AWS, Azure, MySQL, PostgreSQL, MongoDB

Other Technologies

Docker, GraphQL, Git Hooks, GitHub Actions, REST, Linux, Makefile