# Chan Yat Fu Jacky

### Education

## The University of Hong Kong

BEng in Computer Engineering

- Penultimate Year GPA: 3.85 | Final Year GPA: 3.64
- A+ in Operating Systems, Digital System Design, Probabilistic Systems Analysis
- A range in OOP and Java, Advanced database systems, Computer and communication networks, Artificial intelligence, Machine learning, Algorithm design, Senior design project, Integrated design project, Intro to DBMS, Technical English for EEE

## Professional Certifications &

AWS Certified Solutions Architect - Associate (SAA-C03) — Amazon Web Services [Jun 2024]

AWS Certified Developer - Associate (DVA-C02) — Amazon Web Services [Jul 2024]

## Competitions, Honors and Awards

## Finalist — HKU Generative AI Hackathon for Social Good [Oct 2023]

- Led a team of 5 developers to secure 2nd runner-up in the Productive Collaborative Work Award
- Ranked as a finalist out of 24 teams by developing an ADHD-targeted application using Spring Boot, Java, and React.

## Winner — HKU Final Year Project Competition [Apr 2024]

- Distinguished as one of the 11 winners (top 8%) among 136 HKU CE/EEE final year projects.
- Worked on the title of "Implementation of a Singing Voice Synth with MIDI Programming" using React, FastAPI, and PyTorch.

## Work Experience

## NovBee Limited

June 2023 - January 2024

Sept 2019 - June 2024

Full Stack Developer - Internship / Aug 2023 - Jan 2024

- Developing the company website and related API service using Node.js, React, and Python.
- Conceived and executed the backend infrastructure and database schema for the company utilizing Azure.
- Incorporated user authentication functionality into the system website.
- Applied knowledge in Node.js, React, TypeScript, Python, PostgreSQL, GraphQL, Azure.

Software Developer - Internship / Jun 2023 - Aug 2023

- Engineered a data processing pipeline that gather and cleanup 500+ hours of audio data using Python and Selenium.
- Engineered a Singing Voice Synthesis model that result in high MOS utilizing PyTorch.
- Developed the company website and related API service using Node.js and React.
- Applied knowledge in Node.js, React, TypeScript, PostgreSQL, GraphQL, Azure.

May 2022 - August 2022

Digital Marketing and Data Analytics Intern - Internship / May 2022 - Aug 2022

- Enhanced Google search ranking of 10 keywords to the top 3 positions through refined SEO strategies.
- Increased email open and engagement rates by 22% and 17% respectively by improving content quality.
- Applied knowledge in **Python** and **SEO**.

### **Projects**

## Wavy: A web-based Music Workstation (Individual)

Demo Video

- Enhanced UX with a resizable and scrollable canvas featuring history, import/export, and clipboard functionalities.
- Integrated backend voice synthesizer enabling the generation of vocal tracks.
- Provided an isolated library for custom utilization and style modification. | Demo video: <a href="http://youtu.be/uQ2K\_xgbq7g">http://youtu.be/uQ2K\_xgbq7g</a>

## ICMS: Course Management Dashboard (Group)

- Led a 5-people backend development team and was fully responsible for the frontend and database of the application.
- Provides real-time course schedules and information based on the user's context and timing.
- Integrated a facial recognition component for login using Python.

## 2-player Game: Game Utilizing Socket and Multi-threading (Individual)

- 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.

## Folded: A interactive GUI card game (Individual)

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

## Technical Skills

Programming Languages Java, Node.js, TypeScript, JavaScript, Python, PHP, SQL, GraphQL

Frameworks & Tools Spring Boot, J2EE, React, Express.js, Flask, FastAPI Cloud & DevOps AWS, Azure, Terraform, Docker, GitHub Actions Databases & ORM Redis, MySQL, MongoDB, MySQL, PostgreSQL

Language English (DSE level 5), Cantonese (Native), Mandarin (Native)