Zihong Liang

Software Developer | C#, Python & TypeScript |
Passionate about AI-Driven Problem-Solving and DevOps

Contact Info

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AI Portfolio✨: https://kingsley-leung.vercel.app

Personal Profile

A **high-achieving Computer Science graduate (GPA 7.1/9)** who **led a six-member team** to develop an **AI-powered web platform** for wildlife conservation. Skilled in **building and maintaining APIs**, **debugging complex issues**, and **utilising modern frameworks**, demonstrated through internship at Endace and multiple full-stack projects. Recognised for being **collaborative, adaptable, and continuously learning** to stay ahead with the latest technologies. Ready to leverage a strong foundation in **Python, C#, TypeScript** to contribute to impactful, real-world software solutions.

Skills

- **Frontend:** JavaScript, TypeScript, React, Angular, Next.js, HTML, CSS, Tailwind, Bootstrap
- **Backend:** Python, C#, Java, ASP.NET, FastAPI, Express.js, Node.js, Bun
- **Databases & ORMs:** SQL, LINQ, SQLite, Entity Framework (EF Core), PostgreSQL, MongoDB
- **Testing:** Pytest
- **DevOps & Tools:** Git, Docker, Linux, Bash, Vercel, Jira, Confluence, Agile, Scrum, Visual Studio, GitHub Actions, Object-Oriented Programming (OOP)

Educations

The University of Auckland
Bachelor of Science, Jan 2022 – May 2025

- **Major in Computer Science, GPA: 7.1/9** with **two Certificates of Outstanding Achievement** from the faculty.
- Coursework and Projects: **Full-Stack Development, RESTful APIs (Java, C#, Python), SQL, AI/ML, Cybersecurity, Computer Architecture, Data Communications and Security, Operating Systems**.
- **Class Representative for three courses**, recognised for leadership with multiple certificates from the student association

The University of Auckland International College
The University of Auckland Certificate in Foundation Studies (Level 3), Jan 2021 – Dec 2021

- Studied Accounting, Mathematics with Calculus, Physics, and Statistics
- Gained experience in **Microsoft Office** from different coursework

Interests

- **Chatting about emerging technologies**
- **Attending workshops and tech meetups**
- **Developing personal projects**
- **Enjoying Lo-Fi music**
- **Solving IT issues for family and friends**
- **Gaming**
- **Traveling**
- **Sharing my Cantonese cultures**

Work Experiences

Engineering Intern
Endace Technology, Nov 2024 – Feb 2025

- Architected and developed a modular profile system using **Python**, **FastAPI**, and **Jinja2** to **improve scalability and maintainability**, assisting in the deployment and configuration on core network probe products.
- Designed and implemented a dynamic, user-friendly UI with **JavaScript** and **Bootstrap**, **earning commendations from senior engineers** for its **intuitive design** and **positive user experience**.
- **Enhanced system efficiency and maintainability**, streamlining the configuration process for end-users and significantly **reducing the potential for setup errors**.
- Worked collaboratively in an **Agile** team using **Jira**, **Confluence** and **Bitbucket**, while **collaborating with seniors** to enhance features, resolve bugs, and debug issues, maximising **team productivity.**

Professional Notetaker
The University of Auckland, Aug 2024 – Dec 2024

- **Translated complex academic lectures into clear, accessible, and structured notes** for students registered with Student Disability Services, **directly supporting academic inclusivity**.
- **Demonstrated high attention to detail and adaptability** by delivering quality notes across diverse and technical subjects, **consistently meeting strict deadlines**.

Information Technology Operator
Triumen Group Zhuhai Branch, Aug 2020 – Nov 2020

- Provided critical **front-line IT support** for all **hardware**, **software**, and **network issues**, **minimising downtime and ensuring smooth daily operations for the entire office**.
- **Investigated and resolved technical problems** with printers, routers, and desktop applications to **increase operational efficiency**.

Project Experiences

CARE Web Platform: AI-Driven Wildlife Conservation
https://www.capitalise.space/projects/6736f7089df43e2d89de9401
- **Led a 6-member team** to design and implement an **HTML, CSS, React** web platform for AI image-based pest detection.
- Backend built with **Node.js**, **Express.js**, **JavaScript**, integrated **machine learning** with support from a PhD group.
- Improved tracking of species like stoats, **contributing to NZ biodiversity protection.**

PhotoRecipe: AI-Powered Recipe Generator
https://photo-recipe-rho.vercel.app
- Engineered a **full-stack Next.js** application with **Node.js**, leveraging **Firebase Genkit** to orchestrate **Google Gemini AI models** for a complete "photo-to-recipe" pipeline.
- Implemented core features including AI-driven ingredient identification from photos, dynamic recipe generation with detailed instructions and nutritional information, and unique AI-generated dish images.
- Developed a responsive UI using **TypeScript**, **Tailwind CSS**, and **ShadCN**, managing state with **React Hooks** and optimising performance with client-side image compression.

vCard Contact Generator
https://vcardcontactgenerator.vercel.app
- A sleek web app built with **Node.js**, **React**, **Next.js**, **Tailwind CSS**, **Sass** that generates random contact information with the ability to export as `.vcf` (vCard) files. Containerised using **Docker** for consistent local development and deployment.
- Managed and monitored a **CI/CD pipeline** using **GitHub Actions** to **automate testing and deployments** to Vercel.

Concert Booking Service
https://github.com/KingsleyLeung03/concert-booking-service-csharp
- Developed a full-featured **C#/.NET** concert booking web app using **ASP.NET MVC**, supporting event browsing and ticket management via **RESTful APIs**, implemented with **Entity Framework (EF Core)**, **LINQ** and **SQLite.**

Game Library Web App
https://github.com/KingsleyLeung03/cs235-2023-gameswebapp-assignment-zlia403_glo501_skat149
- Implemented a **Flask**-based app using **Python, SQLAlchemy, Jinja2, and Repository Pattern**, implemented **unit and end-to-end (E2E) testing** with **Pytest.**
- Applied clean architecture principles and modular separation via **Flask Blueprints.**

Volunteer Experiences

Class Representatives (x3)
The University of Auckland
- **Elected as class representative three times** (COMPSCI 335, COMPSCI 351, COMPSCI 313)
- Served as a liaison between students, lecturers, tutors, and faculty to communicate feedback and advocate for student needs
- Recognised with **three Certificates of Appreciation** from the Auckland University Students' Association for **effective representation and contribution**

Awards & Certifications

App Integration Workshop - Level 2
IBM
- Developed a deeper understanding of App Integration concepts by completing a hands-on lab focused on practical use cases

Cloudflare TechLabs Certificate of Attendance
Cloudflare
- Participated in "Diary of a Cyber Breach Investigator" workshop, gaining insight into real-world incident response, threat modelling, and breach mitigation strategies

Certificate of Outstanding Achievement (x2)
School of Computer Science, the University of Auckland
- Awarded for exceptional academic performance in Computer Science courses

References available on request