

Education

University of Sydney BACHELOR OF ADVANCED COMPUTING (COMPUTER SCIENCE)

Feb 2020 - Nov 2023

- Dean's List of Excellence · Academic Merit Prize · School of Computer Science Undergraduate High Honour Roll · E12 scholarship

Industry Experience

Akuna Capital SOFTWARE DEVELOPMENT INTERN - UI (WEB)

Dec 2022 - Feb 2023

- Created full stack web-based UIs for traders using **React**, **TypeScript**, **FastAPI (Python)**, **WebSockets**, and **Solace**, deployed using **Kubernetes**
- Rewrote legacy systems using modern technologies and redesigned APIs for modularity, reusability, and maintainability

Canva FRONTEND SOFTWARE ENGINEER INTERN

Dec 2021 - Feb 2022

- Developed an internal tool to facilitate efficient evaluation of algorithms and improve workflows, using **React**, **TypeScript**, and **MobX**
- **Significantly improved testing processes** with a new pipeline to improve developer productivity and reduce friction (**83% reduction** in steps)
- Analysed data using **SQL** and **Python** to extract user insights in order to guide development decisions

Enrich Education FULL STACK DEVELOPER

Nov 2019 - Feb 2020

- Created automated web report system for K-12 tutoring centre using **Vue.js**, **Django REST Framework (Python)**, and **SQLite**
- Concisely visualised student performance over time against peers with interactive graphs using **Chart.js**

University Experience

University of New South Wales CASUAL ACADEMIC

Feb 2023 - Present

- Tutor for **COMP6080: Web Front-End Programming** — teaching classes, running help sessions, and marking

University of Sydney CASUAL ACADEMIC

Jul 2022 - Dec 2022

- Tutor for **INFO1110: Introduction to Programming** — teaching programming in Python to classes of 20, marking, and conducting viva voces
- Topics covered: programming fundamentals, basic object-oriented programming, recursion, graph traversal/search algorithms

UNSW Computer Science and Engineering Society (CSESoc) PROJECT DIRECTOR

Feb 2022 - Present

- Leading a team to build a **hiring management system** to streamline recruitment processes (applications, interviews, and results)
- Developing an MVP using **React**, **TypeScript**, **Tailwind CSS**, **Rust**, and **PostgreSQL**, and designing the UI/UX for various projects
- Created website for **TechSpire**, a tech conference that quickly sold out 120 tickets and attracted several sponsor companies, with **Next.js**
- Created content for and presented both internal and public workshops teaching **JavaScript** and **React** concepts

Projects

KH Item Tracker WEB APPLICATION

🌐 tracker.zaxu.xyz 📺 zaxutic/kh-rando-tracker

- Developed a customisable tracker for a video game series using **Vue.js** and **TypeScript**, and **WebSockets** powered by a **Python** backend
- Integrated with the Open Broadcaster Software (OBS) to embed a transparent overlay that can be remotely controlled
- Used by thousands of people around the world (Cloudflare analytics)

Twitch Colours WEB APPLICATION

🌐 colours.zaxu.xyz 📺 zaxutic/colours

- Developed a full stack web application using **Vue.js**, **Django**, and **SQLite**, integrating with the Twitch **OAuth 2.0** flow for user authentication
- Used **Celery** and **Redis** to asynchronously connect to Twitch IRC servers with OAuth tokens, to dynamically change the user's username colour

Competitions

2022 **UNSW SecSoc x Skylight Cyber CTF**, 5th place — 3rd highest individual competitor

2022 **USYD GDSC Algothon Upper Division Programming Competition**, 6th place

2020 **Atlassian x UNSW SecSoc 2020 CTF**, 4th/83 — highest scoring team with first year students

2018 **National Computer Science School Challenge**, Perfect Score

Skills

Languages JavaScript/TypeScript · Python · Java · C · Rust · HTML/CSS · Shell/Bash · SQL

Frontend React · Mobx · Tanstack Query · Vue.js + Vuex · TailwindCSS · Stitches · SASS/SCSS

Backend tRPC · FastAPI · Flask · Django · PostgreSQL · MongoDB

Other Docker · Figma · Git · Unix/Linux · Nginx · Apache/HTTPD · CI/CD