

Work Experience

Snap Inc. Software Engineer

Dec 2023 – Present

- Implemented and launched group call invites on iOS and Android, increasing group invite shares by 40%
- Created a post-call survey, enabling valuable insights into common issues users face with voice and video calls, uncovering 2 new trends
- Rewrote legacy core calling components from C++ in TypeScript to improve maintainability and developer productivity
- Languages primarily used: TypeScript (React-like internal mobile UI framework), Kotlin, Swift, and Objective-C

Akuna Capital Software Development Intern - UI (Web)

Nov 2022 – Feb 2023

- Created full stack web 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
- Redesigned old UIs to be more usable, intuitive, and efficient, while minimising overhead and transition cost based on user feedback

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 improving developer productivity and reducing friction (83% less steps)
- Analysed data using SQL and Python to extract user insights in order to guide development decisions

University of New South Wales Casual Academic

Feb 2023 – Dec 2023

- Tutor for COMP6080: Web Front-End Programming — HTML, CSS, JavaScript, React, usability and accessibility
- Tutor for COMP2041: Software Construction: Techniques and Tools — Shell/Bash, Regex, and Python
- Contributed features, UX improvements, and bugs fixes to marking webapp using Next.js + TypeScript to increase marking efficiency

University of Sydney Casual Academic

Jul 2022 – Dec 2022

- Tutor for INFO1110: Introduction to Programming — programming fundamentals (Python), recursion, graph traversal/search algorithms

Extracurricular

UNSW Computer Science and Engineering Society (CSESoc) Project Director

Feb 2022 - Sep 2023

- Led a team to build a [hiring management system](#) using React, TypeScript, TailwindCSS, Rust, and PostgreSQL
- Created website for [TechSpire](#) (2022), an industry tech conference, using Next.js
- Helped design the UI/UX for various projects using Figma and contributed various features and fixes

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

Projects

KH Item Tracker Web Application

📺 [zax-xyz/kh-rando-tracker](#)

- Developed a customisable tracker for a video game series using Vue.js and TypeScript, and WebSockets powered by a Python backend
- Aids players to keep track of progress and resources, and abstracts complicated logic by making as many deductions as possible
- Used by thousands of people around the world (Cloudflare analytics)

Twitch Colours Web Application

📺 [zax-xyz/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 using user OAuth tokens to dynamically change the user's colour

Competitions

2023 **UNSW SecSoc 2023 Hackoween CTF**, Second Place

2023 **WIT Hackathon 2023**, Second Place | *Next.js, tRPC, TypeScript, Tailwind, Prisma*

2023 **SYNCS HACK 2023**, Atlassian Award for Best Social Impact | *Next.js, tRPC, TypeScript, Tailwind, Prisma*

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

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