**Education** 

University of Sydney

Sydney, AU

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

• Weighted Average Mark: 83.7%

### **Experience**

#### **UNSW Computer Science and Engineering Society (CSESoc)**

Sydney, AU

PROJECTS SUBCOMMITTEE MEMBER

Feb 2022 - Present

· Working in a team on the React frontend for an in-house hiring management system that will streamline subcommittee recruitment

· Integrating frontend pages with the backend server and authenticating routes to ensure users only see what's relevant to them

Canva Sydney, AU

FRONTEND SOFTWARE ENGINEER INTERN

Dec 2021 - Feb 2022

Nov 2019 - Feb 2020

• Developed an internal tool to facilitate the efficient evaluation of an algorithm 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** Sydney, AU

• Created automated web report system for K-12 tutoring centre using Vue.js, Django REST Framework, and SQLite

- Concisely visualised student performance over time against the rest of their classes with interactive graphs using Chart.js
- Automatically emailed summarised reports created with Matplotlib at the end of each term to parents of each student
- Significantly improved internal processes for efficiency, accuracy, and reliability, improving satisfaction of both staff and customers

## **Projects**

**FULL STACK DEVELOPER** 

KH Item Tracker 

\*\*Website\*

WEB APPLICATION

**⊙** GitHub

- Developed a customisable tracker for progress in "randomiser" mods for a video game series using Vue.js and TypeScript
- Used WebSockets powered by a Python backend for synchronisation between clients
- Used by thousands of people around the world (Cloudflare analytics)

Twitch Colours 

\*\*Website\*

WEB APPLICATION

**⊙** GitHub

- 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

University Project | 98.53%

Systems Programming

- Implemented a virtual machine, disassembler, and assembler for an assembly language with a "backwards" non-byte-aligned binary format
- Implemented small programs directly in assembly for end-to-end tests
- Optimised for a final compiled virtual machine binary size of under 10 KiB

**ProcChat**Systems Programming

University Project | 100%

2021 Semester 1

- $\bullet \ \ \text{Created a concurrent localised chat server in C using inter-process communication with named pipes}$
- Thoroughly tested through unit and end-to-end tests using CMocka

# **Competitions**

### 4<sup>th</sup>/83 — Atlassian x SecSoc 2020 CTF

2020

CYBERSECURITY COMPETITION

Atlassian, University of New South Wales

- Placed 4th out of 83 teams in a 2 day cybersecurity capture-the-flag competition, run by Atlassian and the UNSW Security Society
- Team was 50% composed of first year students, the highest scoring team with members this young