Adelaide, SA
Australia

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EDUCATION

The University of Adelaide — **Adelaide, SA**

Bachelor of Engineering (Electrical and Electronic) (Computer Engineering Major), with Bachelor of Mathematical and Computer Science (Computer Science Major) — Mar 2018 – Jun 2023

GPA: 6.676 / 7
Recognised in the top 15% of students by the Golden Key International Honours Society.

WORK EXPERIENCE

Fivecast — **Adelaide, SA**

Undergraduate Software Engineer — Mar 2022 – present
Software Engineering Intern — Nov 2021 – Mar 2022

Worked in the product development team creating Fivecast ONYX Vetting, an automated solution providing intelligence insights in security vetting applications. Full stack software development using TypeScript (React), Java, PostgreSQL and Elasticsearch.

E-Train Interactive — **Adelaide, SA**

Content Developer — Jul 2021 – Nov 2021

Assisted in coding features for the Unity game engine to aid in the development of nursing simulation training modules.

The University of Adelaide — **Adelaide, SA**

PASS (Peer Assisted Study Sessions) Leader for Object-Oriented Programming — Feb 2019 – Dec 2019

Organised and facilitated twice weekly sessions to assist university students in understanding their programming coursework.

PROJECTS

Sorting Algorithm Visualiser – (GitHub) (View App)

Created an application providing a visualisation of several common sorting algorithms (e.g. Bubble Sort, Merge Sort, Quick Sort, etc.). Utilised TypeScript in combination with React and CSS to develop an interface capable of running and animating sorting algorithms based on a set of user input including a chosen algorithm, the number of values to sort and the speed of the animation.

University Honours Project – Constrained Cooperative Agent Creation Using Grammatical Evolution – (Ingenuity Video)

In a small group investigated the use of Grammatical Evolution (GE) as a method for the creation of cooperative agents using the card game *The Crew* as a model. Wrote code in Python to develop the game environment, and model and train the agents with GE. Resulted in agents able to play *The Crew* at a higher win rate than comparable machine learning and hard coded methods.

The Adelaide Rover Team GUI – (GitHub)

Worked in a small team to create a web-based GUI to communicate with the Adelaide Rover Team's moon rover. Utilised JavaScript and Node.js to develop the front- and back-end functionality along with HTML and CSS to develop the user interface. Utilised RosBridge and the ROS JavaScript library to develop communication methods between the GUI and the rover.

COVID-19 Contact Tracing Website – (GitHub)

Worked as a group to create a COVID-19 contact tracing website with full login and venue/location-based check-in capabilities. Specific contributions include the check-in page and map page UI and functionality which tracks and displays all relevant check-ins for different user types. The website was coded using HTML, CSS and JavaScript with Node.js and a MySQL database.

LANGUAGES

Proficient

Java, JavaScript / TypeScript (React)

Experienced

C, C++, Python, HTML, MATLAB, CSS (Stylus), SQL (PostgreSQL, MySQL)

ADITIONAL ACHIEVEMENTS AND EXPERIENCE

Australian Rover Challenge — 2021 – 2022

Member of the University of Adelaide team creating a rover to operate on 'the moon'.

AFP Missing Persons Hackathon — 2019

Member of a team working throughout the hackathon to uncover open-source intelligence for real missing persons cases.