# EDUCATION

### The University of Adelaide

Feb. 2022 - Nov. 2024

Bachelor of Computer Science

# EXPERIENCE

#### Software Engineer Intern

Jul. 2024 - Oct. 2024

Edgible

- Built a tool injection system using Python, FastAPI, and Docker, allowing an Ollama instance to call external tools (e.g., web search, GitHub API) for more accurate, context-aware responses.
- $\circ$  Automated data enrichment workflows by integrating the system with n8n, reducing manual data retrieval time by  $\sim 30\%$  through dynamic processing and Google Sheets output.
- Conducted extensive API testing with Postman to ensure reliable functionality, including stress-testing maximum prompt lengths and response handling for Ollama integration.
- Enhanced deployment scalability by streamlining automation pipelines through Google Cloud Platform and n8n, optimising performance and facilitating future system expansion.

Software Engineer Feb. 2024 - Jun. 2024

Guardian Eyes - AI-Powered Security Camera

- Built an AI-powered web application using HTML and Node.js for real-time detection of abusive speech in video feeds by extracting audio from combined audio/video streams and integrating a third-party speech recognition API.
- $\circ$  Contributed to research and pitching efforts that secured 2nd place and 2000 prize in the Thinc Lab Teche Challenge, developing a function of the contributed to research and pitching efforts that secured 2nd place and <math>2000 prize in the Thinc Lab Teche Challenge, developing a function of the contributed to research and pitching efforts that secured 2nd place and <math>2000 prize in the Thinc Lab Teche Challenge, developing a function of the contributed to research and pitching efforts that secured 2nd place and <math>2000 prize in the Thinc Lab Teche Challenge.

## Projects

# ClarityLog - AI-Enhanced Journaling Platform

Feb. 2025 - Present

React, Vite, PostgreSQL, Supabase, Ollama, Node.js

- Engineered a full-stack journaling platform that transforms traditional journaling by integrating AI-driven features such as sentiment analysis, emotion detection, entry type classification, and theme extraction.
- Implemented key functionalities including real-time autosave, Markdown support, PostgreSQL full-text search, JWT authentication, and a dynamic network view that connects entries by shared themes and relationships, all designed to provide users with actionable insights and progress tracking.

# ClubHub - University Club Platform

May. 2023 - Jun. 2023

Vue.js, Node.js, MySQL, REST APIs

- Led a team of four to design and develop a platform for university students, with the potential to connect entire student communities through club discovery and event management.
- Developed secure user authentication using Google-based OAuth, real-time notifications, and membership features, ensuring a seamless and secure user experience.

# Volunteering and Community Involvement

# The University of Adelaide Competitive Programming Club

Jan. 2024 - Present

Member and Participant

• Achieved a top 5 placement in a 5-hour, team-based coding competition that featured diverse algorithm problems, competing against a broad range of skilled programmers, including internationally ranked competitors.

# SKILLS

# **Programming Languages**

Python, JavaScript, C++, C, MATLAB, R

#### Web Development

React, Vue.js, Node.js, FastAPI, Vite, HTML/CSS

# **Development Tools**

Git, GitHub, Postman, n8n, JWT Auth, REST APIs

## AI & Machine Learning

Ollama, Computer Vision, OpenCV, ML Integration

#### Databases & Cloud

PostgreSQL, MySQL, Supabase, Google Cloud, Docker