EDUCATION

Bachelor of Computer Science

The University of Adelaide

EXPERIENCE

Software Engineer Intern

Jul. 2024 - Oct. 2024

Feb. 2022 - Dec. 2024

Edgible Pty Ltd

- Built a tool injection system using Python, FastAPI, and Docker to extend Ollama's capabilities, allowing it to dynamically call external tools, simplifying complex tasks such as data enrichment and generating Docker Compose files from simple prompts, making advanced operations easier for users.
- \circ Automated data enrichment workflows by integrating the system with n8n, reducing manual data retrieval time by $\sim 60\%$ through dynamic processing and Google Sheets output.
- 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 video streams and integrating a third-party speech recognition API.
- Contributed to research and pitching efforts that secured 2nd place and a \$2000 prize in the ThincLab Tech eChallenge, showcasing the system's scalability for deployment in nursing homes and hospitals worldwide.

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.
- \circ Designed and implemented a multi-prompt system that split a massive prompt into six concurrent, shorter prompts, improving processing speed by an estimated 40% and reducing response formatting errors by over 99%, effectively eliminating them under all test conditions.

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.
- o 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