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OVERVIEW

Computer Science graduate specializing in applying AI with in-depth knowledge of the constantly evolving AI ecosystem. Proven ability to architect and deploy user-centric generative AI applications. Passionate about leveraging AI to create efficient, impactful, ethical and considerate software development and research.

EDUCATION

The University of Queensland

Bachelor of Computer Science

Brisbane, QLD

Graduated 2025

AI INTEGRATION & SOFTWARE DEVELOPMENT PROJECTS

AI-Powered Reflection Platform for University Students

September - November 2025

Flask, SQLAlchemy, MySQL, JavaScript, Nginx, uWSGI, Claude API, Locust

- Created Lighthouse, a full-stack AI reflection platform MVP to be tested and then used by a UQ entrepreneurship course to guide students through structured, multi-stage conversations.
- Engineered a "dual-AI" architecture using the Anthropic Claude API; one agent analyzed response depth while a second generated dynamic, probing follow-up questions.
- Deployed the application to a UQ Zones (Linux) production environment, configuring Nginx as a reverse proxy and uWSGI as the application server to ensure high scalability
- Validated this scalability by developing a Locust-based load testing framework that simulated realistic, multi-stage AI conversations for 100+ concurrent users.
- Maintained separate development and production environments to ensure code stability and prevent downtime

Educational Coding tool for teachers - [bolt.teacher](#)

July - August 2025

Prompt Engineering, LTI 1.0, UX Design

- Contributed to a University of Queensland research project focused on empowering educators to create innovative classroom tools using generative AI
- Systematically optimized the core AI agent by developing an iterative, AI-assisted prompt refinement process, enhancing the reliability and quality of the generated LTI-compliant code.
- Designed a complete no-code user journey, including an AI-powered ideation module and a sandboxed "LTI simulator," to allow non-technical teachers to confidently build, refine, and preview their custom applications

Artificially marking student work - [Book Chapter on this](#)

June - July 2025

Python, Pandas, Excel, Data Visualisation

- Research Project for the University of Queensland to determine how well AI grades RiPPLE activities
- Designed a comprehensive evaluation framework to benchmark the performance and consistency of AI-based grading models against results from human educators
- Proposed advanced statistical comparison methods, (Grade distribution analysis, box-and-whisker plot comparisons, and rank-order correlation) to provide nuanced views of AI marking tendencies (e.g. leniency, harshness)

AI Student Feedback System

2024

PHP, Python, CodeIgniter, OpenAI API

- Built a full-stack web application that utilized OpenAI API to provide students with instant, AI-driven formative feedback on submitted drafts based on teaching-defined criteria
- Designed the system to promote ethical AI use in education, supporting the learning process and enhancing digital literacy without replacing crucial teacher involvement

AI-Accelerated Personal Web Apps

2024 - Ongoing

React, Supabase, Vercel, AI-Assisted Development

- Experimented with deploying user-centric web apps meeting personal needs, showing potential for individuals to create tailored digital tools without tech background

Additional Software Projects

- Developed a remotely controlled Raspberry Pi robot for maze navigation with web interface & path visualization.
- Created a mobile full-stack treasure hunt platform (React Native app) with location & QR features.
- In a group, created a mobile AR Olympic experience where you run against virtual athletes

Case Study on Copilot Suite Implementation

2025

- Researched the integration of Copilot across Microsoft's productivity suite
- Analysed best practices for AI integration within software ecosystems and broader society
- Examining AI's varied impact, adoption rates, and implementation across different industries and cultures

TECHNICAL SKILLS

AI Application & Integration: Prompt Engineering, API Integration, AI Ethics, Automation, & the latest AI Tools

Languages: Python, Java, JavaScript, PHP, SQL

AI Tools: Up to date and experience with AI tools for coding (Cursor, Kiro), general use (Gemini, ChatGPT, etc), research, image, music and video generation

Frameworks & Web: React, React Native, Flask, CodeIgniter, HTML, CSS

Databases: SQLite, Supabase

Platforms & Tools: Git, Figma, Photoshop, Video Editing