

Julian Fusco-Wright

☎ 0460 300 475 | ✉ jfuscowright03@gmail.com | 🌐 Julianfw.com.au

Work Experience

Queensland University of Technology / Junior Web Developer (Digital Experience)

September 2023 - March 2025

This role required me to build, test and maintain core Digital Experience services across QUT's portal platform, as well as deliver projects in alignment with QUT's digital strategy. In this role I:

- Collaborated with a range of **enterprise DXP teams** to deliver stable and reliable digital solutions for thousands of staff and students.
- Developed a **real-time dashboard** to display live car park occupancy alongside historical usage trends for all campus parking facilities. I designed the business logic layers with Spring MVC, frontend views with JavaScript and coordinated release planning with the DXP mobile team in line with established enterprise change management procedures. This app now serves thousands of daily requests and has had a positive consensus among staff and students who rely on these facilities for work and study.
- Implemented **system monitoring and observability solutions** through the Splunk Distribution of the OpenTelemetry Java agent, enabling real-time APM and infrastructure monitoring across critical university systems. This **halved our response time for non-critical incidents** from 20–30 minutes to 10–15 minutes, and **improved issue triaging** plus **early problem detection** to a similar degree.
- Integrated **real-time Salesforce chat interfaces** in QUT's Portal Platform so staff, students and guests could connect live with university representatives. Developed and **optimised SQL scripts** to automate **content injection during CI/CD**, making updates and redeployments simple and scalable.
- Supported colleagues in **learning and implementing** modern web tech such as React and Vite, helping transition parts of the existing Spring Boot MVC portlet framework to more modular, maintainable design patterns. My prior experience with modern web technologies meant I could offer practical advice, guide design choices, and document new strategies for the team. I led and architected solutions end-to-end, driving decisions around what gets built and why it gets built while documenting design choices for the senior leaders and other developers.

Private Tutor / Tutoring Computer Science at QUT and UNSW

March 2022 - Jan 2025

- **Tutored** and **mentored** students across various subjects including Discrete Structures, Algorithms and Complexity, Software Development, Network Security and Machine Learning.

Education

Queensland University of Technology

Bachelor of Information Technology (GPA 6.6)

- Majoring in Computer Science and minoring in Intelligent Systems (AI) and Network & Security.
- Received multiple QUT Executive Deans' Commendation for Academic Excellence awards.

Relevant Skills

- **Programming Languages:** C#, Java, JavaScript (ES6), TypeScript, Python, PL/SQL, Bash
- **Web Technologies:** HTML & CSS/SCSS, React, Next.js, Node.js, jQuery, Material-UI, Tailwind

- **API Architectures & Patterns:** RESTful Patterns, API Development over HTTP, Microservices, GraphQL, SOAP, Webhooks, Pub/Sub
- **Cloud & DevOps:** AWS Lambda, Docker, Ansible, Splunk Cloud, Bitbucket Pipelines, GitHub Actions
- **Databases:** Oracle, MySQL, PostgreSQL, MongoDB
- **Version Control & Collaboration:** Git, Bitbucket, GitHub, Jira, Confluence
- **Build Tooling:** Webpack, Vite, Rollup, Babel, npm, yarn, Clang/gcc, MSBuild, Apache Maven

Relevant Technical Projects

Digital Music Analysis

I built a desktop app in C# to automate the analysis of digital music files, comparing parallel and sequential algorithms for performance. The motivation was to help musicians and researchers quickly extract time-frequency features and visualise musical notes. I led the design and development, implementing custom audio parsing logic, build scripts and tests, while documenting results for future development.

Visualising CS Algorithms

I built this interactive web app to help students and developers visualise and learn pathfinding algorithms. I noticed that existing tools were either outdated or not user-friendly, so I designed a solution with customisable mazes, adjustable playback, and thorough test coverage. I led the analysis, design, and build, using React, TypeScript, node and docker, and shared learnings with peers to help them explore algorithm concepts.

StudyPilot

I created this LMS so that my clients can access more study materials and track progress outside our tutoring sessions. I saw a gap in how students engaged with material after tutoring, so I built interactive exercises and real-time tracking, making admin and content management easy for tutors. I led the end-to-end development, from requirements analysis to implementation and ongoing support. I used modern JavaScript frameworks, TypeScript, a self-hosted linux based VPS, NGINX reverse proxy, a Node backend and documented workflows for future tutors.

DNS Sinkhole

I created a LAN proxy server on Raspberry Pi to automate ad and malware blocking for my home network. Saw an opportunity to improve network safety and reduce manual filtering. I led the build, implementation, and ongoing maintenance, and shared setup guides with family and friends to help them secure their own networks.

MyAiCopilot

I designed and built this full stack web application to automate the extraction and processing of text and mathematical content from images. The goal was to streamline manual data entry for students and researchers, and improve accuracy by leveraging OCR and language models. I led the project through analysis, design, build, testing and deployment, using Node.js, TypeScript, Docker, and Google Vision. I documented processes and created guides for future users, with feedback loops to refine the product.

References

Daniel Jack

Senior Software Engineer, QUT
daniel.jack@qut.edu.au
3138 4828

Jon Mahony

Customer Success - Student
Management, TechnologyOne
jonmahony84@hotmail.com
0422 888 614

Joshua Wright

EL2 Director, GenAI Innovation &
Strategy, Digital Experience,
ATO.
joshua.wright1@ato.gov.au
0418 194 394