

NICHOLAS MCGUFFIN

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SUMMARY

Full-stack software engineer with 4 years building and shipping production web software with TypeScript, JavaScript, React, and Python. Experienced across the stack, from a real-time React single-page application to Python services that integrate external systems and stream live data to the front end, with a track record of owning features end to end and turning complex requirements into reliable, maintainable software.

EXPERIENCE

Software Engineer

June 2022 – August 2026

Boeing Defence Australia

Brisbane, QLD

- Designed and built a responsive React and TypeScript single-page application delivering real-time monitoring, control, and data visualisation for complex networking systems.
- Designed and developed Python backend services that interface with hardware and software over serial, REST, and WebSocket connections, streaming live data to the front-end client through a shared datastore.
- Helped drive the re-architecture of a single-product system into a modular, plugin-based platform now supporting 4 products on shared infrastructure, with capacity to onboard more.
- Built internal tooling for network modelling, visualisation, and analysis (interactive diagrams, shortest-path analysis, mock environments), reducing reliance on physical hardware and accelerating feature development.
- Delivered features end to end, collaborating with systems, firmware, hardware, and networking teams to translate product requirements into reliable solutions under real-world constraints.
- Mentored 1–2 junior engineers, graduates, and interns each cycle over 2 years, supporting onboarding and remaining an ongoing technical point of contact.
- Maintained delivery quality through unit, integration, and DOM testing, CI/CD pipelines, and daily code reviews in a high-compliance, security-critical environment.

Peer Assisted Study Sessions (PASS) Leader

Feb 2021 – Oct 2022

Central Queensland University

Brisbane, QLD

- Facilitated weekly programming and systems-analysis study sessions for first-year students.
- Taught foundational programming and problem-solving concepts in an inclusive, discussion-driven format.

TECHNICAL SKILLS

Languages: TypeScript, JavaScript, Python, SQL, Java (academic)

Frontend: React, HTML, CSS/SCSS, Single-Page Applications, State Management, Material-UI, KnockoutJS

Backend: Python, Node.js, REST, WebSockets, Spring (academic)

Testing: Jest, React Testing Library, Karma, DOM Testing, Pytest, unittest

Tooling & Practices: Git, CI/CD (Jenkins), SonarQube, Linux (Fedora), Atlassian (Jira, Confluence, Bitbucket)

EDUCATION

Bachelor of Information Technology (Application Development)

Completed Oct 2022

Central Queensland University

Brisbane, QLD