

Professional Summary

Master of Information Technology graduate with Distinction from UNSW, specialising in **backend development, API engineering, and test automation**. Experienced in building **TypeScript and Node.js** backend services, integrating **GraphQL and REST APIs**, developing **Ful-stack** applications, and creating **automated testing** solutions with Robot Framework and Selenium. Strong foundation in **PostgreSQL, AWS**, and software engineering principles, with hands-on experience gained through industry internships and full-stack projects.

Technical Skills

Programming: Python, TypeScript, JavaScript, Java
Backend & APIs: TypeScript, Node.js, Flask, REST APIs, GraphQL, OAuth2, JWT, API Key Authentication, Swagger, Postman
Frontend: HTML5, CSS, React, Tailwind CSS, Ant Design
Database: PostgreSQL, MySQL, Pandas, NumPy
Testing & Automation: Robot Framework, Selenium, Playwright, Jest, API Testing, Regression Testing, Functional Testing
Cloud & DevOps: AWS (S3, DynamoDB), Docker, Git, GitHub, Jira
Data Collection: Scrapy, BeautifulSoup

Education

Master of Information Technology Sep 2023 - Sep 2024
The University of New South Wales, Sydney
Distinction average. *Special interest in: Data Science and Engineering, Web Front/Back-End Programming, Scalable Software Architecture, API Development*

Bachelor of Science in Computer Science Sep 2020 - Sep 2023
The University of New South Wales, Sydney
Distinction average. *Key learning areas included: Big Data Management, Data Structures and Algorithms, O-O Design & Programming*

Employment History

Software Testing Intern Apr 2026 – Present
Ctrack, Sydney, Australia

- Developed and maintained automated test cases using Robot Framework and Selenium for web-based enterprise applications
- Improved test stability and execution reliability by refining test flows, selectors, and reusable keywords
- Participated in Agile ceremonies including daily stand-ups, sprint activities, and collaboration with developers and QA team members
- Executed regression and functional testing across multiple reporting and fleet management modules to verify system behaviour and business requirements
- Investigated and diagnosed test failures in staging environments by analysing logs and application behaviour

TypeScript Backend Developer Mar 2025 – July 2025
Dixon Technology Services Pty Ltd (Switchboard Cloud), Sydney, Australia

- Developed and maintained backend services for an integrated supply chain platform using TypeScript
- Developed API client modules to call external GraphQL and RESTful endpoints, transform response payloads into our internal data schemas, and return standardized results—using OAuth, JWT and API Key authentication
- Built and maintained internal tools to streamline data reporting, leveraging Metabase and PostgreSQL for efficient query and visualization workflows and backups to AWS S3 for long-term archival
- Created and executed automated unit tests using Jest to ensure code reliability and minimize production bugs
- Collaborated closely with cross-functional teams in an agile environment to deliver scalable backend solutions and improve system interoperability
- Troubleshoot API performance bottlenecks and contributed to architectural improvements, enhancing system responsiveness and maintainability

Information Technology Assistant Sep 2025 – Nov 2025

Southern Institute of Early Learning & Leadership Pty Ltd, Sydney, Australia

- Provided technical support by troubleshooting hardware and software issues, including printers, Wi-Fi connectivity, computer/laptop faults, and Microsoft Office (Word, Excel, PowerPoint) usage
- Explained internal system workflows to users from diverse backgrounds and resolved various service requests efficiently
- Developed a Python script to convert Word-formatted questions into Moodle GIFT format, improving efficiency and reducing manual formatting workload

Full stack Engineer Intern

Mar 2025 – July 2025

TIDYTEDDY PTY LTD, Sydney, Australia

- Optimized a custom web crawler in Python (Scrapy), increasing data by approximately 136% to gather agent names, phone numbers, emails, and job titles from every real-estate agency site across Sydney
- Debugged and enhanced the company website's front-end, resolving critical UI issues and rolling out fully responsive mobile layouts across multiple pages
- Designed and implemented a backend management dashboard with a user-friendly UI and database integrations, improving workflows

Software Engineer Intern

Dec 2021 – Mar 2022

Crown Bridge Group, Shenzhen, China

- Successfully developed and maintained a highly efficient Office Automation (OA) system, improving workflow productivity by 30%
- Built a secure and scalable Network-Attached Storage (NAS) server, enabling secure and easy file access across 10+ devices
- Developed a Java application for public document notifications, ensuring 99% timely updates
- Troubleshot system issues and improved software performance through debugging and optimizations
- Collaborated with 5+ cross-functional teams to enhance software functionalities and resolve user issues

Projects

Personal Portfolio Website

May 2026 – Present

Tech Stack: *Next.js, TypeScript, React, Tailwind CSS, MDX*

- Designed and developed a personal portfolio website to showcase projects, work experience, technical skills, and engineering notes
- Implemented a component-based architecture with reusable UI components and responsive layouts
- Built a multilingual content system and MDX-powered blog for technical articles and interview preparation notes
- Integrated project showcases, career timeline, and dynamic content rendering to improve maintainability and scalability

Online PowerPoint System

Feb 2024 – Apr 2024

Tech Stack: *React, Ant Design, REST API, Cypress, Selenium*

- Developed a web-based PowerPoint editor supporting presentation creation, editing, deletion, and persistence
- Built reusable React components and integrated backend services through REST APIs
- Implemented end-to-end testing using Cypress and Selenium to validate key user workflows
- Delivered a responsive application with real-time editing capabilities and achieved Distinction

Movie Search & Recommendation Platform

Feb 2023 – May 2023

Tech Stack: *Python, Flask, MySQL, Docker, Postman*

- Led backend development for a full-stack movie search and recommendation platform
- Designed and implemented MySQL database schemas and Flask APIs for authentication, search, and recommendation features
- Integrated external APIs and Docker-based deployment workflows
- Delivered account management, recommendation engine, chat functionality, and content sharing features
- Achieved High Distinction and strengthened skills in full-stack development and API design

Dungeon Mania Backend System

May 2022 – Aug 2022

Tech Stack: *Java, OOP, Design Patterns*

- Developed a Java-based backend system for a persistent dungeon game
 - Applied object-oriented design principles and software design patterns to implement game mechanics
 - Built inventory management, combat logic, entity interactions, and persistence functionality
 - Improved maintainability through modular architecture and comprehensive testing
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