Darcy Studdert

FULL-STACK SOFTWARE ENGINEER

darcystuddert@gmail.com
0411 057 504 · NSW 2293
github.com/Bountable

Full-stack engineer who builds features end to end — designing SQL schemas and stored procedures, exposing them through REST APIs, and shipping the React/TypeScript interfaces that consume them. Comfortable across the stack and into deployment, self-hosting containerised infrastructure with Docker, private networking, and hardened, backed-up services. I care about measurable impact: faster APIs, leaner queries, and tools that turn slow manual processes into instant ones.

EXPERIENCE

Software Engineer

Jan 2025 – Present

Newton Green

- Sole developer of a scientific-conference (ASM) registration platform serving ~300 delegates, staff, and sponsors, owning every feature end to end across the React front-end, C# back-end, and SQL database.
- Designed and integrated an on-demand delegate badge-printing system, driving a label printer's API to generate and print dynamic badges for conference attendees.
- Develop and optimise C# back-end services and RESTful integrations, and author SQL schemas and stored procedures to keep queries efficient.
- Maintain and support live, in-production deployments, diagnosing and resolving issues to keep services stable.

Data Breach Reviewer

Oct 2024 – Present

Cyber Suite

- Conduct document reviews within data-breach response projects to identify impacted individuals.
- Maintain strict confidentiality and data-privacy protocols while working independently in a remote environment.
- Contribute to live incident-response scenarios in real-world cyber-security operations.

SELECTED PROJECTS

Tissue Bank — Specimen Management Platform

Capstone

.NET · React · SQL Server

- Built a deployed, full-stack platform for the Breast Cancer Trials research team, replacing a static Excel report that took up to a month to produce with an interactive, on-demand view of every specimen.
- Engineered a .NET (ServiceStack) synchronisation service that ingests ~60,000 specimen samples from an external source into custom, query-optimised data models in under 30 minutes.
- Built a virtualised React data grid with the MUI X Premium Data Grid, providing customisable filtering and one-click Excel export while staying snappy across tens of thousands of rows.
- Secured the platform with OpenIddict-based authentication and authorisation.
- Tuned the data layer with indexing and refined stored procedures, cutting average API response times from ~2.5s to under 200ms.

Serverless AI Chatbot — Full AWS Stack

AWS · Lambda · DynamoDB

- Architected an end-to-end serverless chatbot on AWS, with Lambda functions behind API Gateway, DynamoDB for conversation state, and S3 + CloudFront serving the static front-end.
- Integrated the OpenRouter API to route prompts to large language models, and Amazon SES for transactional email.
- Automated build and deployment with a GitHub Actions CI/CD pipeline for repeatable, hands-off releases.

SELECTED PROJECTS (CONT.)

Travelling Salesman Solver

Java

- Built a Java solver implementing both an exact dynamic-programming approach (Held–Karp) and a hill-climbing heuristic for larger inputs.
- Benchmarked solution quality against runtime to map the trade-offs between the two strategies across increasing problem sizes.

INFRASTRUCTURE & SELF-HOSTING

Self-Hosted File Server

Docker · Tailscale · Cloudflare Tunnel

- Deployed open-source file-storage software on a Linux host, exposed securely to the internet via a Cloudflare Tunnel and reachable privately over a Tailscale mesh network.
- Containerised the stack with Docker and hardened the deployment by running the service inside a chroot jail to isolate it from the host filesystem and limit access.

Self-Hosted Obsidian Sync

Docker · CouchDB · Tailscale

- Ran a CouchDB-backed Obsidian LiveSync server in Docker for real-time, cross-device note syncing, accessed privately over a Tailscale network.
- Automated regular backups to a private GitHub repository via a scheduled cron job for version history and disaster recovery.

TECHNICAL SKILLS

Languages	C#, TypeScript, Java, C++, SQL
Frameworks	.NET, ASP.NET, ServiceStack, React, Angular
Web	REST APIs, OpenIddict (OAuth 2.0 / OIDC), Material UI (MUI X), responsive HTML5 & CSS3, Vercel
Databases	Microsoft SQL Server, PostgreSQL, CouchDB
Infrastructure	AWS (Lambda, API Gateway, DynamoDB, S3, CloudFront, SES), Docker, Linux, Tailscale, Cloudflare Tunnel, CI/CD (GitHub Actions)
Tools	Git/GitHub, Jira, SQL Server Management Studio

EDUCATION

Bachelor of Software Engineering (Honours)

Graduated June 2026

University of Newcastle · Honours Class II, Division 1

Diploma in Information Technology

2022

University of Newcastle

AWARDS & HONOURS

- **3rd place** — Palo Alto Cortex XSOAR Capture the Flag, University of Newcastle.
- **College Commendation List** — College of Engineering, Science and Environment.
- **Honours Class II, Division 1** — Bachelor of Software Engineering.

ADDITIONAL

Languages	English, Indonesian, Malay
Volunteer	Derawan Ocean Cleanup — team-based marine conservation initiative
References	Available on request