

Nathan Spencer

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RELEVANT WORK EXPERIENCE

Backend Software Engineering Intern

Full-time, Jan 2024 - Present

Macquarie Group (Adviser Online team)

- Saved 1800 hours of employee work annually (approx 1 full time position) by eliminating unnecessary monitor rearrangement while hotdesking for 2000+ employees, by driving tech support to implement my automation
- Sped up developer feedback loops 2X and saved cloud costs by reducing my team's Bitbucket pipelines time 50% by removing repeated Gradle tasks, parallelising steps, and making non-essential steps trigger manually
- Improved software quality by setting up test containers to allow for local integration testing, building in test coverage reports into CI/CD pipeline and writing additional JUnit tests to increase coverage from 40% to 80%
- Increased observability by adding GCP email alerting for stagnant Pub/Sub messages to all environments

DevOps Software Engineering Intern

Part-time, June 2023 - Dec 2023

Katana1

- Improved security, observability, and ease of cloud development by implementing a system in which:
 - New cloud role can be created and approved with a PR to a Git repo, syncing to the cloud via Terraform in Bitbucket pipelines
 - This cloud role can then be used, without an access key, by instead using OpenID Connect (Identity Federation) with the repo GUID
- Reduced sales quote generation time 50% with Google Apps Script automations in Sheets
- Improved employee device security by automating CrowdStrike Falcon installation with Jumpcloud, and adding logging using Splunk and the CrowdStrike API

Fullstack Software Engineering Intern

Full-time, Jan - May 2023

OFX (Payments team)

- Reduced per-invocation costs 90% and scaled an AWS microservice 50x (evading the 15 minute Lambda timeout) by creating an initiator Lambda function in .NET
- Improved ease of multi-team frontend development by converting architecture from monolith to micro frontend and updating NPM dependencies, in React / Typescript, as well as converting the backend-for-frontend by from REST API to GraphQL

System Administrator

Part-time, Jun - Dec 2022

Spencer Private Wealth

- Decreased time to generate client reports 80% by creating an auto filling chromium browser extension in Javascript
- Eliminated manual regulatory email forwarding by creating a Google Apps Script cron job

Junior Software Developer

Part-time, Jan - May 2022

Advice RegTech

- Ensured references to financial regulations were current by updating Ruby on Rails codebase
- Increased suggestive functionality for clients by adding additional RegEx matches to regulations

EDUCATION

Bachelor of Engineering (Honours) (Software)

2022 - 2024

UNSW Sydney

- 1 of 12 awarded Co-op Scholarship
- Distinction Average WAM, Effective Altruism Society Secretary

Higher School Certificate

2016 - 2021

Shore School

- 1 of 5 awarded Full Academic Scholarship
- Prefect, Editor-in-chief of Student Newspaper, Debating Team