



Nathan Birrell

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ABOUT ME:

Full-stack Software Engineer with over ten years of experience, from some of Australia's largest companies to small teams in fast-growing startups.

Currently motivated to continue developing my abilities in team leadership, beyond those of an individual contributor.

Open-minded engineer who typically thrives in empowered, multidisciplinary teams with a strong sense of purpose.

KEY SKILLS:

1. Specialised frontend experience across React, Typescript, NextJS & CSS
2. Strong backend commercial experience with Node, GraphQL Yoga & Express, REST, both RDBMS & NoSQL
3. Solution architecture on AWS Lambda, ECS, AppSync, DynamoDB, CDK/SAM
4. Focus on maintainability, through unit testing, linting, E2E testing & CI
5. Agile SCRUM software delivery

Experience

Stax (by Versent)

SENIOR SOFTWARE ENGINEER • OCT 2018 - PRESENT

Stax is an AWS cloud management platform, exists to empower teams with consistency, confidence and velocity. [View the landing page →](#)

- Ownership of long-term strategy for multiple frontend applications and a backend API service
- Led the architecture and build for a backend-for-frontend project, to bring multiple microservices together for the client-side
- Set-up strong foundations early for maintainability with unit testing, linting, CI processes and written documentation for a growing team (from 8 to over 20 engineers)
- Improved quality of delivery through implementation of an automated end-to-end test solution to catch regressions early
- Tech: Typescript, GraphQL, Apollo, React, Jest, Playwright, NodeJS, AWS Lambda, AppSync, DynamoDB Serverless, SQS, SAM, CDK and more.

Bureau of Meteorology

SOFTWARE ENGINEER • MAR 2018 - OCT 2018

- Worked on a project team to build a completely new weather experience for BOM's general public audience. One of Australia's [top 40](#) websites by traffic
- Improved our application's reliability with a strongly-typed tree-structured state management library
- Worked with junior engineers to improve reusability and maintainability through smart component abstraction and separation of concerns
- Tech: Typescript, React, Mobx with mobx-state-tree, Service Workers, Jest/Enzyme, ES6+, styled-components.

Belong (by Telstra)

FRONT-END ENGINEER • NOV 2016 - MAR 2018

- Responsibilities including onboarding new engineers, maintaining unit test coverage
- Migrated a legacy Knockout/JQuery project to a more manageable React/Redux tooling configuration
- Tooling: React, Redux, Webpack, ES6/Babel, React server-side rendering, Expo and React Native.

Deloitte Digital

FRONT-END DEVELOPER • JAN 2014 - NOV 2016

- Feature development for clients such as Telstra, ANZ, Herbert Smith Freehills, RACQ, Victorian Comprehensive Cancer Centre and QSuper

- Owned front-end estimation and delivery of user stories in an Agile SCRUM environment
- Improved quality on projects through architectural decision discussion and sharing ideas for writing readable and maintainable Javascript
- Regularly presented ideas back to the wider Frontend Practice
- Introduced a feature-based Git workflow ('git flow')
- Regular attendee at MelbJS, LASTConf, MelbCSS

Side Projects & Volunteering

Leesy (Startmate S23)

2023

- Advised a [local startup](#), on their tech strategy and helped build out their MVP web application
- Managed contractor delivery, set up CI/CD pipelines and helped refine their tech roadmap
- Implemented NextAuth for authentication, with simple role-based access control
- Tech: Typescript, Node JS, Vite with SSR, Next Auth, Express, GraphQL Pothos & Yoga, PostgreSQL, AWS ECS, Fargate, ELB

Soulection 24/7 Radio App

2021

- A [radio app](#) to stream random Soulection Radio episodes 24/7
- Included some Apple Music-style [blurry animated backgrounds](#) that match the episode cover and tablet-drawn player controls
- A great chance to experiment with Tailwind CSS, drawing vectors on iPad and integrating with SoundCloud's API

TourXOz (for the Black Dog Institute)

2019

A cycling trip from Cairns to Cape York, through some of Australia's most remote country to raise awareness for mental health and engage with local communities. Donations supported the Black Dog Institute.

Overcast for macOS

2017

A macOS client for the popular Overcast podcast player, with over [130 stars on Github](#). Built with Electron and Node.

Poseidon

2017 - 2018

A hobby project built with Ruby on Rails and a create-react-app + Typescript frontend. The goal: to improve the experience around surf forecast modelling. We had some fun challenges around presenting graphs and numerical data in a user-friendly way; storing and parsing model data and calculating a "Surf Potential" figure. Multiple third-party integrations involved (ie: NOAA, BOM).

Education

Royal Melbourne Institute of Technology (RMIT University) (2012 - 2015)

Bachelor of Business (Information Systems) (Applied) (minor in Marketing)