# Nathan Birrell

🇦🇺 Melbourne, Australia | Web | Github | Linkedin | nathanbirrell@gmail.com | September 2023

About me:

- 10 years software engineering experience with some of Australia's largest companies, specialising in modern front-end web application development.
- In-depth experience with Typescript, create-react-app (and its surrounding ecosystem), NextJS, Vite/Vite SSR, GraphQL and Node.
- Commercial experience with many backend services also. Namely Node, Express, GraphQL Yoga, GraphQL Pothos, Prisma ORM, Postgres and GraphQL. As for infrastructure, most of my experience is in AWS, with products like Lambda, ECS, CDK and many more.
- Not attached to any specific technology or framework, generally open to new tech stacks and frameworks and always open to learning new things.
- Typically thrive in empowered, self-sufficient and multidisciplinary teams. Keen interest in process, written/async communication and improving the way teams work.

## Experience

**Stax (by Versent)**                                    SENIOR SOFTWARE ENGINEER • OCT 2018 - PRESENT

Stax is an AWS cloud management platform, which exists to speed-up and improve the quality of cloud infrastructure delivery.

- As a Senior Front-end Engineer, I work on building and managing strategy around our frontend applications.
- Responsible for both the single-page app (client side React app) and our backend-for-frontend app which consists of an AppSync API, NodeJS/Typescript Lambda resolvers, SQS Queues and more.
- Tech: Typescript, GraphQL, Apollo, React, Jest, NodeJS, AWS Lambda, AppSync, CDK, etc.
- Some challenges include: managing style consistency across multiple separate frontend projects and teams; having frontend engineers manage their own backend-for-frontend (our AppSync GraphQL API) and wrangling client-side state to present long-running cloud tasks.

View the landing page at stax.io →

**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.
- Tooling: Typescript, React, Mobx with mobx-state-tree, Jest/Enzyme, ES6+, styled-components.
- Interesting challenges:
  - managing tree-structured state and weather datapoints
  - finding the right abstractions for reusable components
  - working with a moderate-sized team to agree on long-term technical decisions

**Belong (by Telstra)**                                    FRONT-END DEVELOPER • NOV 2016 - MAR 2018

Mid-level Front-end Developer on a React/Redux/Webpack web application. Key activities:

- Tooling: React, Redux, Webpack, ES6/Babel, server-side React rendering
- Built out a hybrid native application using Expo and React Native.
- Onboarding new developers, maintaining Jest unit testing coverage

- Migration of our legacy front-end app out of an unmaintainable Knockout/JQuery set-up to a more manageable React/Redux ecosystem.

**Deloitte Digital**                                    FRONT-END DEVELOPER • JAN 2014 - NOV 2016

Website and web application builds for clients such as Telstra, ANZ, Herbert Smith Freehills, RACQ, Victorian Comprehensive Cancer Centre and QSuper.

Front-end feature development in SCRUM delivery teams:

- Regularly owned front-end estimation and delivery of user stories end-to-end with considerable complexity and time constraints.
- Focussed on improving quality through: objective architectural decisions and discussion, sharing ideas for writing readable and maintainable Javascript and presenting ideas back to the wider FED team.
- Assisted product owners, designers and UX to design solutions that maximise business value from more effective development effort.
- Attended conferences and completed training such as: Deloitte FED training (mostly React & Angular), Pluralsight courses (i.e. Crockford's JS Good Parts) and meetups/conferences (MelbJS, LASTConf).
- Helped design/introduce a feature-based Git workflow ('git flow') for multiple clients.

## Side Projects & Volunteering

**TourXOz 2019 (for the Black Dog Institute)**

TourXOz 2019 involved cycling 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 with mental health education, early diagnosis and suicide prevention.

**Soulection 24/7 Radio App (2021)**

As a big fan of Soulection Radio, I made a little radio app to stream random episodes 24/7, with some Apple Music-esque blurry animated backgrounds that match the episode cover.

View the project on Github →

**Overcast for macOS (Archived)**

A macOS client for the popular Overcast podcast player, with over 130 stars on Github. Built with Electron and Node. Discontinued since Apple Silicon Macs can now run the iOS Overcast now.

View the project on Github →

## Education

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

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