



Tom Clarkson

High end full stack developer in Sydney, Australia.

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I am a full stack developer with over twenty years web and mobile experience, most recently for startups building React/node/GraphQL/AWS based SaaS platforms and mobile apps.

I am the guy who can find the one character in ten thousand lines of code that needs to change to fix a particularly stubborn bug that only occurs in production every seventh page load on alternate Tuesdays.

So far I have never come across a technical problem I couldn't solve. Challenge me.

Technologies

My current preferred tech stack

- AWS
- AppSync
- Lambda
- Terraform
- Node
- ES6
- Webpack
- SCSS
- Apollo
- React (hooks)
- JSS
- Jest
- ESLint
- Git

Other stuff I work with

- Redux
- Amplify
- .NET (Primarily C#)
- Swift
- Objective C
- Java
- Python
- SQL
- Cordova
- Angular
- Ubuntu
- Mongo
- Gulp
- Mocha

Open source

Some of my projects

Path Game

github.com/tqc/path-game

A puzzle game with randomly generated rules built in React

React Native Web Components

github.com/tqc/react-native-web-components

Seamlessly use html react components in react-native apps

Datagit

github.com/tqc/datagit

Using git as a structured data store

Other open source contributions

Git

github.com/git/git

Updated git subtree to work well on repos with over 200,000 commits

React Native

github.com/facebook/react-native

Implemented message queueing for communication between web and native layers; Fixed handling of large diffs in code analysis

Cloud9 IDE

github.com/ajaxorg/ace

Implemented iPad keyboard support

Past Experience

2021 - 2021 Front End Engineer @ BCG DV / Coop

Startup product development on a react native/typescript/graphql/node/azure functions stack

Achievements include

- Building a native app from nothing to prototype to initial release using the latest tools
- Built the first version of the app quickly enough that everyone assumed it was just a mockup

2020 - 2021 Front End Engineer @ Lumiant

Startup product development on a react/amplify/AppSync/lambda stack

Achievements include

- Built the front end portion of the app from rough prototype to released product

2019 - 2020 Tech lead / Senior Engineer @ Spitfire

Full stack fintech development on a react/Apollo/AppSync/lambda stack

Achievements include

- Streamlined the build / release process reducing the commit to deployment time from 10 minutes to 30 seconds
- Migrated an idiosyncratic and error prone codebase to standard react
- Improved rendering time of a key page by 3700%
- Introduced automated tests that didn't crash if ever pointed at real code
- Developed code to seamlessly transition from redux saga to Apollo without back end cooperation
- Automated complex infrastructure deployment using terraform while transitioning to a microservices architecture
- Learned just how terribly a long string of job interviews can go

2016 - 2019 React, React Native

Since switching to React as my primary development platform, I have worked on a series of React Native apps, typically with a corresponding React web implementation.

Achievements include

- Contributing code to the core react native project, used on millions of devices
- Implementing the MongoDB API on top of Realm to simplify code reuse
- Designing a framework to apply git-based versioning and collaboration tools to non-code data
- Developing tools to rapidly prototype apps with shared code across web and native systems
- Learning way too much about the internals of SSH and certificate based authentication

2013 - 2016 Angular, Cordova

For several years my main project was front end lead for a series of white label financial calculators for government agencies and super funds, along with a few smaller mobile app projects.

Achievements included:

- Implementing the git smart http protocol in pure javascript
- Applying modern JS build tools (Browserify/Webpack/Babel/ES6) to a system still based on Angular v1
- Designing and building a video-based hybrid iOS app
- Building a highly extensible framework for rapid development of single page apps
- Extending Cordova apps with native iOS code to achieve a more native feeling app than is normally achievable with webviews
- Setting up a full modern development environment, with continuous integration (Codeship/Mocha/ESLint) and automated deployment to AWS and Azure

2010 - 2014 Sharepoint

Back in the enterprise world, I spent several years with my main project being working on the corporate intranet for a large HR consultancy. Although this involved producing a quarter million lines of intranet code which I would be quite happy to never see again, there was a reasonable amount of opportunity to work with modern tools.

Achievements included:

- Backporting parts of ASP.NET MVC to improve developer productivity on an older platform
- Developing tools to implement features of modern javascript webapps within a restrictive intranet environment
- Applying a modern js build and test system to a platform highly incompatible with that approach

2008 - 2010 .net

Needing a change after spending 3 months on post-merger integration, then 3 months splitting up the same systems, I began working on a social media startup with something resembling a modern web app structure.

Achievements included:

- Managing a team of remote developers
- Designing and building a semantically aware web crawler

2005 - 2008 SharePoint

After another unexpected platform change, I found myself specializing in SharePoint based systems and moving from development to a consulting and enterprise architecture role.

Achievements included:

- Building a widely used visual studio plugin
- Learning to be productive despite many 8 hour meetings

2004 - 2005 Java, .net

Returning to the enterprise world, I worked for a series of consultancies with mostly government and financial services clients, switching my primary development platform from Java to .net after accidentally ending up in the wrong job interview.

Achievements included:

- Delivering a presentation on tablet UI concepts to Bill Gates
- Writing code handling over a billion dollars in transactions daily

2001 - 2003 Startup

After seeing a potential market in some of the large enterprise sites I had been working on, I founded my first startup, pivoting from enterprise to small business systems when the dotcom market became less reliable.

Achievements included:

- Turning an idea into a VC funded startup
- Developing a complex single page ajax application several years before that was a thing

1997 - 2000 Web

While studying computer science (minimally relevant) and physics (even less relevant) I started doing freelance web development work, which soon expanded to working on some of the largest websites in Australia and New Zealand.

Achievements included

- Setting a project back a month by missing one day
- Building some quite terrible big ball of mud JS apps to take advantage of newly available dynamic html capabilities