Tyler Brown, Software Engineer

Chattanooga, TN (EST) | tyler@tybro.io | LinkedIn | GitHub
- 15 years of experience in full-stack web development with a focus on front-end
- Expert in JavaScript, Node, React, Redux, HTML/CSS, HTTP, and browser technologies
- Skilled at leading cross-team initiatives, collaborating across departments, and translating high-level goals into technical requirements

Experience

Millie, Lead Engineer, Jul 2019 - Present
- Built the entire B2B SaaS platform from the group up with full life-cycle ownership.
- Built as a universal JS app (Node, React, Redux, Postgres) to enable SEO and optimize load times for best possible UX.
- Implemented balance and budget systems for carefully tracking every cent in complex financial systems upon which I built donation matching, gift cards, pooled funds, & more.
- Implemented both SAML & SCIM protocols for SSO and automated provisioning in a multi-tenant platform.
- Built a custom component system with responsive, pixel-perfect design.
- Built componentized social feeds with pinterest-style masonry layout.

NextRoll, Staff Engineer, Oct 2016 - Sep 2021
- Led the Customer Experience team in building new front-end applications in React & Redux. Shipped new signup, onboarding, homepage, & more.
- Led efforts in building and managing a cross-team React component library including key components (like navigation and base API clients) and upgrading the whole system to latest versions.
- Built universal JavaScript application for building custom reports - shows a preview on-demand in the frontend as well as generates PDF version on set schedule on the backend.

StatMuse, Front-End Architect, Jan 2016 - Aug 2016
- Built the main universal web app from the ground up in React, Redux, ES6.
- Built and open-sourced custom JavaScript router for handling universal needs.

OpenTable, Senior Engineer, Jan 2015 - Dec 2015
- Built isomorphic web apps using Node.js, Flux (fluxible), and React.
- Shipped new product for casual waitlist dining.
- Setup build pipelines using Gulp, Grunt, and Browserify for Sass and ES6.

Variable, Senior Engineer, Jan 2013 - Dec 2014
- Built iOS apps that interfaced with Bluetooth devices using CoreBluetooth, CoreData, AFNetworking, & Shinobi Charts.

- Collaborated with firmware engineers to build iOS SDK to interface with hardware devices.
- Built RESTful APIs with Rails that queue background jobs via Redis & Sidekiq.
- Built Node.js/Websockets app that streams real-time data from iOS to web clients.
- Wrote scripts in JavaScript for generating PhotoShop documents containing precise layouts of colors to be printed out on an industrial printer for calibrating color sensing devices.

SociallyU, Software Engineer, Jan 2010 - Dec 2012
- Built IVR/Twilio app that queues incoming callers which agents can claim via web UI.
- Extensive experience in Rails web apps: social networking, billing, video, e-commerce, multi-tenancy, etc.

Skills

Primary Stack
JavaScript, TypeScript, Node.js, Express, React, Redux, SSR, HTML, CSS, Sass, TailWind CSS, PostgreSQL, Relational databases, Redis, AWS, CloudFlare, S3, NPM, GIT, Webpack, Heroku, Babel

Protocols
HTTP, REST, OAuth, SAML, SSO, SCIM, GraphQL

APIs
Stripe, Slack, AWS, Auth.0, MailChimp, Mandril, SendGrid, Google Maps, Twilio, & many more

Testing
Jest, Mocha, React Testing Library, Puppeteer, Enzyme

Also Experienced With
Next.js, Ruby on Rails, iOS, Swift, Objective-C, Capacitor.js, PhoneGap, Electron

Personal Projects

Row Keeper
- An iOS app for tracking rowing workouts I built to solve my own needs
- Hundreds of daily active users
- Built with Backbone.js as an embedded webview via PhoneGap, and published it to Apple App Store, Amazon, and Google Play Store

Dot Snake
- Built just for fun - the classic game of snake with competitive leaderboards

- An iOS app with the UI written in React in an embedded webview via Capacitor and the underlying game logic written in native Swift
- Scores are persisted to the server using Express & Postgres
- Implemented a custom signing mechanism to ensure scores submitted to the API are legitimate

Universal Javascript

A particular passion of mine is building universal JavaScript apps - apps that run and render on both the server and the client. I first began using this technique in the early days of React while at OpenTable, and I've implemented it on many projects since.

I used it at NextRoll to build a reporting app that shows reports in real time in the UI, and the exact same code is used to generate the report in the scheduled background jobs on the server. This was a tremendous benefit at NextRoll in reducing the number of disparate places generating reports which inevitably had discrepancies.

I've also used the technique at Millie where SEO and a speedy UX are both critical - since the server renders all routes, everything is crawl-able, and after the initial render, the app behaves as an SPA for a great UX.

These days I have to point out that the technique I use here is very different from Next.js in a superior way - there's no distinction between server and client components, and the data fetching logic is the same code used on both server and client. I'd love to tell you more about it!

Contact & Links

Email: tyler@tybro.io
LinkedIn: https://www.linkedin.com/in/tybro0103/
GitHub: https://github.com/tybro0103