

Nicholas Husher

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Full Stack Developer Javascript Enthusiast Code Wicche

ES 2022 / TypeScript	Redux / Redux Saga	Client-side security
Single-page app design	Frontend build tools	Functional programming
HTML / CSS	GraphQL / Apollo	Scrum / Kanban
Clojure	Git	UNIX / OS X
Node / npm	SQL	Microservices / REST
React / React Native	Docker / Compose	HTTP / WebSockets

Frontend Lead Faraday

Remote in Boston, MA January 2015 – Present

Faraday provides AI-driven data science for companies that can't or don't want to set up their own in-house data science group. They use a flexible infrastructure to apply artificial intelligence to different business problems, from generating marketing lists to recommending the locations of new storefronts.

I have worked in various intermittent capacities for Faraday since 2015, taking a full-time role as Frontend Lead in late 2020. As a small startup looking for a niche in the market, my role is multifaceted. My main responsibility is improving their self-service market analysis web application. I'm also involved in database design discussions, data security, and continuous integration.

SELECTED PROJECTS

- Migrated a 30,000-line frontend application from Angular 1.x to React. This reduced the number of state-related bugs in the UI by embracing data immutability and functional programming styles.
- Converted build tooling from Grunt/Gulp to Webpack, which opened up better ways to compose code artefacts together. JS, CSS, images. With webpack, assets could be split/combined as the use case demanded, just by updating some configuration.
- Built a new GraphQL API service from the ground up to better serve the UI. This had the knock-on effect of reducing the amount of manually-managed state in the frontend app, reducing the surface area of state-related bugs.
- Instituted strict security policies in the app. Content security policy headers, in particular, reduce the ability for malicious code to exfiltrate sensitive PII or HIPAA-protected data from the frontend.

Staff Software Engineer Indigo Agriculture

Boston, MA June 2019 – October 2020

Indigo Agriculture is trying to improve the market for commodity grain. This takes two main forms: first, they offer an organic microbial seed treatment that can improve crop yields by increasing drought tolerance and pest resistance; and second, by offering an online marketplace for farmers to sell their crops directly to food companies, rather than selling to grain clearing houses.

SELECTED PROJECTS

- Was the technical lead on a React Native version of Indigo's Marketplace application. The React Native Marketplace was designed to load faster and work better in areas with poor internet access—like in the seat of a tractor in a midwestern corn field.
- I led a team to do architectural cleanup and developer experience improvements. For example, we migrated across a couple major Apollo Client versions, eliminated several common frontend failure cases, reduced build times on our CI server, and cut out unused legacy code.
- Worked on a team of staff engineers to build an accessible, consistent, forward-looking component library for building user interfaces at Indigo. Part of this migration was deprecating buggy and heavyweight material-ui components in favor of home-grown implementations.

Software Architect Lola Travel

Boston, MA January 2017 – August 2017

Lola Travel was a startup that built lightweight, user-focused travel software for small businesses.

SELECTED PROJECTS

- Worked on a team to build the first iteration of Lola's mobile application, built in React Native. The focus of the app was low-friction signup and use, coupled with an AI-driven hotel recommendation algorithm. I implemented a cross-platform form focus management system, because focus management was poorly defined in React Native at the time.
- I was the technical lead on a web application that let admins at a small business set booking criteria, which would inform which hotels, flights, and car rentals would appear in the mobile app. This project went through many iterations and pivots as the startup attempted to find product-market fit.

Senior Engineer Pwnie Express

Boston, MA June 2016 – December 2016

Pwnie Express provided vulnerability and threat detection software. They used custom-designed sensors to detect devices connected to a network, and wireless devices that are adjacent to the network, like cell phones, bluetooth devices, wireless printers, or credit card skimmers. These devices were categorized and indexed in a cloud-based database, which could be queried and navigated from a browser-based webapp.

My job was threefold: I worked with other developers to implement new features that users and prospective clients want, that would drive engagement on the platform; I lead an application-wide effort to migrate the project from a legacy Ember implementation to one written in React, with more modern and functional sensibilities; And finally, I provided user experience leadership in an environment where there were many talented engineers, support reps, and salespeople, but no designers.

Senior User Interface Developer Dealer.com / Dealertrack

Burlington, VT December 2010 – January 2015

Web Developer Bear Code

Montpelier, VT May 2006 – December 2010

Bachelor of Arts, Computer Science

University of Vermont Burlington, VT Graduated 2007

Associates of Science, Computer Engineering Technology

Vermont Technical College Randolph Center, VT Graduated 2003