

HIGHLIGHTS

- 8 years of experience with JavaScript, Node.js, and React
- Built and scaled search site from launch to +1 million Active Monthly Users
- Automated 401k processing and reduced manual work of operations team by 40.6%

Skills

Backend: Node, PostgreSQL, JavaScript, TypeScript, GraphQL, Docker, AWS

Frontend: React, JavaScript, HTML, CSS, Jest, Redux

Experience

Independent Contractor – San Francisco, California / Remote

October 2022 – Present

Freelance Web Contractor

- Prototype and integrate Order Management System into existing custom banjo order flow by ingesting legacy spreadsheets into functional database with Postgres, providing a single source of truth for order status and order adjustments and customizations
- Audit and fix e-commerce site for security risks and deprecated payment gateway

Private Software Development Instructor

- Provide hands-on real-world instruction and apprenticeship to junior iOS, MacOS, and web developers
- Guide students through the full lifecycle of building apps, from paper prototyping, Firebase and Postgres database schema design, automated Jest testing, TestFlight for beta testing, Heroku deployment, and AppStore publishing
- Teach best practices when using git and GitHub for version control, pull requests, and collaboration
- Student outcomes include breaking into the industry with a six-figure junior developer role

Human Interest – San Francisco, California / Remote

February 2022 – October 2022

Senior Software Engineer I

- Designed system for automating the 401k contribution submissions for 120,000 of our clients using Typescript and Node.js, reducing the amount of manual submission work by operations team by 40.6%
- Planned and executed incremental migration of functionality from the legacy monolith codebase to SOA services, enabling our product to meet ambitious scaling goals
- Built full-stack internal tooling, dashboards, and tables using React, Metabase, REST, and GraphQL endpoints, providing Operations staff with actionable insights on clients' 401ks.
- Onboarded, trained, and mentored new engineers on best practices and code quality standards
- Audited, revised, and debugged the process documentation for local Docker developer setup, enabling new engineers to spin up their environments and hit the ground running
- Provided shifts of 24/7 on-call triage and hot-fix engineering support with PagerDuty for a dozen production AWS microservices, ensuring high availability and customer satisfaction
- Identified and corrected inefficient Postgres database queries using pganalyze
- Developed a multi-level alert system by integrating PagerDuty, Datadog and Jira, designed to respond to application errors and unusual AWS service usage (CPU, memory, and database). This system informs on-call personnel as needed, and also auto-initiates Jira tickets for efficient issue tracking and resolution.
- Identified and debugged complex issues using Datadog queries, tracing the roundtrips of end-user actions across multiple services

Senior Full Stack Engineer

- Launched a ground-up microservice rebuild of [GovOS Cloud Search](#)
- County records search engine used by dozens of counties across the US, including Dallas. Check out how cattle brands are recorded in Texas by exploring the live deployed [site!](#) 🐮
- Scaled app to +1 million Active Monthly Users
- Lead engineer for our API Service, the central multi-protocol Node.js hub for all microservices
- Engineered responsive React UIs featuring Web Socket connections to the backend to deliver rapid, up-to-date updates for the user
- Employed RabbitMQ messaging to allow multiple backend microservices to respond to important events
- Designed secure authentication system using JWTs to protect sensitive documents. Our application has experienced zero data breach events in its five years in production
- Developed a Configuration Service and a client NPM module that enabled hundreds of parameters to be customized for different counties' document attributes and functionality requirements
- Incorporated ElasticSearch for our Search Service to query millions of documents in seconds
- Built customer support portal micro frontend with React to allow support staff to correct orders, reset passwords, issue refunds, adjust user settings, and manage user roles and permissions
- Integrated Stripe, enabling users to easily purchase documents and securely store payment information
- Designed and built reusable Document Preview React component shared by three of our front-end services
- Document Preview features include redaction, zoom, express checkout, linked documents, and OCR text highlighting
- Crafted reusable, customizable Receipt React functional component, used across our three front-ends. Empowered other developers to easily prototype changes using React Cosmos sandbox, including visual regression automated tests.
- Architected a complex, extensible e-commerce checkout handler with JavaScript that handles cart checkouts, express checkouts, recurring subscription payments, prorations, and refunds
- Expanded GovOS revenue by implementing the ability to purchase certified documents
- Minimized bugs and regressions by building extensive suites of unit tests (Jest, Mocha, Chai), integration tests (Docker), and E2E tests (TestCafe)
- Managed deployments across test, dev, and production environments with Jenkins and Google Cloud Platform (GCP)
- Coordinated with frontend and backend teams to design and adjust API contracts, which are then published as a private NPM package, shared among microservices, and enforced via JSON Schema

Learners Guild – Oakland, California

July 2016 – July 2017

Full Stack Engineer

- Lead teams of junior devs building and maintaining the following projects at Learners Guild:

Coach Queue

- Node + React application that allows junior developers to request help from coaches in real-time
- Designed PostgreSQL database schema, DB migrations with Knex, and tests with Mocha

Trossello

- Open source clone of Trello.com. SPA React + JavaScript app to organize projects with lists and cards.
- Wrote Chai test suites for Express API routes, database methods, and user authentication

Freelance Web Developer – Oakland, California

January 2015 – July 2017

- Designed the backend, database, and SQL schema for [Strive Messaging](#)'s SMS campaign organizing tool
- Built proof-of-concept React frontend for Inbox AI featuring interactive JavaScript charts and graphs

Education

University of Minnesota, Minneapolis, Minnesota
BA in Psychology

September 2004
Graduated December 2007