Sean Richardson

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Profile

I'm a full stack Software Engineer passionate about fighting climate change. Known for producing high quality code, collaborating with product and design, and thorough PR reviews, I learn quickly, and pride myself on providing great customer service to both neighboring teams and end users.

Experience

Software Engineer, *IndigoAg* 🔗   May 2022 — Aug 2023
Improved the ease and efficiency of the data collection process for a web app that collected renewable practice implementation data from farmers, calculated how much carbon they sequestered, and issued them carbon credits. (React, Next, TS, Cypress, Python, Flask, SQLAlchemy, PostgreSQL)
- Tech lead for a project that used a remote sensing API to collect farmer planting data upon request
- Increased the reliability of our CI pipeline by adjusting the app's CircleCI config to stop tests from timing out
- Refactored e2e tests from using three frameworks to mock API calls to using one. Documented strategies and pitfalls in how to implement this refactor
- Thoroughly reviewed pull requests to ensure only high quality code was approved. Carefully crafted pull requests to make it as easy as possible to understand the changes I made and test them out
- Automated grower planting data entry by implementing a feature that used OCR to scan a crop insurance form, extract relevant data, and ferry it into our existing schemas and data types
- Created a client management dashboard for partner CS reps to prioritize their time and actions, maximizing their ability to generate carbon credits
- Refactored our data collection UI, increasing its usability

Co-Creator, Software Engineer, *Waypost (waypost-io.github.io)* 🔗   Feb 2022 — present
Designed and built Waypost, an open-source, lightweight, self-hosted feature flag management platform that specializes in A/B Testing. (Node.js, React/Redux, Express, PostgreSQL, EventSourceAPI, Axios, TailwindCSS)
- Collaborated on the design of the architecture and Dockerization of the platform, leading to a smoother implementation
- Led the design of the Feature Flag Manager App's backend server, including building an ORM-like class that made it easier to create routes for the API
- Refactored the backend server, increasing its readability and efficiency
- Created the hashing algorithm used in the SDKs, enabling the placement of users into test and control groups for experiments
- Led the creation and editing of the comprehensive technical case study 🔗 , documenting design decisions and the problem domain

Full-Stack Web Developer, *Self-Employed*   Nov 2020 — Mar 2022
Developed open-source software, some highlighted projects include:
- **HookTester**, a RequestBin clone that allows one to test and debug webhooks (MongoDB, Express, React)
- A **Rabbit MQ** server for the Earthshot Forest Team's AI tool to detect forest change using satellite data (Python)

Skills

Languages
TypeScript, JS, Python, CSS, Ruby, Go, SQL, HTML

Technologies
PostgreSQL, CircleCI, MongoDB, Docker, Git/GitHub, HTTP, REST APIs, SSE, webhooks

Frameworks/Libraries
React/Next/Redux, Styled Components, Flask, Celery, Cypress, Jest, MSW, PyTest, SQLAlchemy, Express

Cloud
AWS (EC2, Elastic Beanstalk, S3), Heroku, DO Droplet

Education

Launch School 🔗   Nov 2020 — May 2022
Ruby Back-end Track, JavaScript Front-end Track, Capstone.

University of Maryland, College Park,   Aug 2014 — May 2018
BS - Civil & Environmental Engineering, Minor - Sustainability Studies

Certificates

- Climate Change for Software Engineers 🔗