

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 – May 2022

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 [🔗](#)