

SKILLS JavaScript, React, Redux, Jest, Node.js, MobX, Ruby on Rails, PHP, Laravel, Python, MySQL, MongoDB, Java, Git

EXPERIENCE

Software Engineer

Curology

Mar 2020 - Present

- Redesigned application survey architecture using Laravel, MySQL, and React to allow surveys to be generated through an interactive UI, improving developer experience and iteration speed by 10x.
- Collaborated with finance team to rewrite internal tax code by leveraging TaxJar API, enhancing error logging through Sentry and ability to recover from outages through retrievable jobs.
- Mentored intern through onboarding process, pair programming and code reviews to build email validation system that reduced email bounce rate by 18%.
- Deconstructed monolith application architecture into modular monolith using domain driven design to maximize developer productivity.
- Headed refactor of MobX data stores, lowering error rates by 15% by eliminating data denormalization and improving inheritance structure.
- Established centralized project decision log and documentation responsibility guidelines, enabling easier progress tracking and improving discussion productivity by 50%.
- Ensured 90%+ code coverage through PHPUnit, Jest and Cypress testing.

Undergraduate Research Assistant

University of California, San Diego Soft-tissue Biomechanics Laboratory

Sep 2017 - Jun 2019

- Characterized the time course and magnitude of pulmonary vasculature and the relation to cardiac function and published findings to ASME Journal of Biomedical Engineering.
- Developed MATLAB program for data alignment from multiple sources and algorithmic signal smoothing.

PROJECTS

Dimension | *(React/Redux, Rails, PostgreSQL, ActionCable/WebSockets, AWS S3, WebRTC, Heroku)*

[live](#) | [github](#)

A single-page Discord clone where users create Servers/Channels to send messages and video chat.

- Optimized database search speed by removing N+1 queries, using ActiveRecord's associations to extract data from multiple tables in a single query.
- Incorporated Rail's ActionCable with Redis to manage WebSocket connections for live-chat and displaying online status in real-time.

Delicieux | *(MongoDB, Node.js, Express, Webpack)*

[live](#) | [github](#)

A dynamically updating meal planning application with smart recipe suggestions based on ingredients and diet goals.

- Reduced number of REST API hits by selectively caching commonly used ingredient information, improving website responsiveness by 5x.
- Harnessed Redux single-state management to streamline communication between backend and frontend architecture to facilitate CRUD functionality, allowing users to update their meal plan and ingredients accurately.

Amaurosis | *(JavaScript, HTML5, CSS)*

[live](#) | [github](#)

A minimalist puzzle solving game built with JavaScript.

- Established a unidirectional data flow architecture with a single application-level state object to prevent mutated state and data collision, ensuring reliable DOM rendering.
- Built a custom physics engine using JavaScript to support collision of multiple objects, manage player and AI movement patterns, and calculate vector changes due to objects reflecting off walls or passing through portals.

EDUCATION

App Academy - Software Engineering Bootcamp, 2019

University of California, San Diego - *Biomedical Engineering*, GPA: 3.7, 2015-2019