Justin Shieh

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SKILLS JavaScript, TypeScript, React, Redux, MobX, Jest, Node.js, CSS, HTML, MaterialUI, Bootstrap, Ruby on Rails, PHP, Laravel, MySQL, PostgresQL, MongoDB, Python, Java, Git

EXPERIENCE

Software Engineer II
Curology   *Dec 2021 - Present*

- Established centralized project decision log and documentation responsibility guidelines, enabling easier progress tracking and increasing discussion productivity by 50%.
- 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.
- Mentored intern through onboarding process, pair programming and code reviews to build email validation system that reduced email bounce rate by 18%.
- Reduced number of REST API hits in sign-up by precomputing necessary data in a batch request and selectively caching commonly traversed question paths, leading to a 3x more response UI.
- Built reusable component library in collaboration with design team, greatly reducing redundant code and allowing for 25% faster iteration on new site.

Software Engineer
Curology   *Mar 2020 - Dec 2021*

- Led development of message application to address gap in user engagement, creating a seamless communication experience between users and providers, which led to 6% revenue growth and significant boost in retention.
- Collaborated with finance team to refactor internal tax code by leveraging TaxJar API, enhancing error logging through Sentry and ability to recover from outages through retriable jobs.
- Headed refactor of frontend data stores, lowering error rates by 15% by eliminating data denormalization and streamlining inheritance structure.
- Optimized checkout flow with UX/UI team to include express checkout, increasing conversion rates by 10%.
- Deconstructed monolith application architecture into modular monolith using domain driven design to maximize developer productivity.
- 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, Redis, AWS S3, WebRTC, Heroku)*   **live** | **github**

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

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

- 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.
- Led team of four developers by directing design discussions and delegating engineering tasks.

EDUCATION

App Academy - Software Engineering Bootcamp, 2019
University of California, San Diego - *Biomedical Engineering, GPA: 3.7, 2015-2019*