

Harrison Lau

Software Engineer

Technical Skills

Front end: Javascript (ES6), Typescript, React, React Native, Redux, Webpack, Styled-Components, Web3.js, HTML, D3 **Back end:** Node.js/Express, PostgreSQL, MySQL, MongoDB, Cassandra, Firebase, NextJS, Nginx, Passport.js, Socket.io **Relevant:** Git, Docker, AWS (EC2, S3), Heroku, Google Cloud Platform, CI/CD, Mocha/Chai, Jest/Enzyme, Figma, Zeplin

Projects

friendTrips, Software Engineer - A travel planning app built with React, Express, PostgreSQL and Socket.io

- A social, travel planning application -- conceptualized, developed, and delivered in 10 days.
- Defined front end component tree and state management architecture using Redux and React Context.
- Designed authentication routes and managed user logins and session tokens with Passport.js, allowing any number of *authorized* users to access and communicate via websocket connection in real-time.
- Built Points of Interest Search map using MapboxGL, allowing users to search for and navigate to different POIs.
- Created Itinerary Calendar components, allowing users to easily create and share their personal trip itineraries.

ShoeEmporium, Software Engineer - A full-stack online retail web app using React, Express, and Cassandra.

- Working with legacy code, performed database benchmarking to determine best fit to support the microservice.
- Designed RESTful API routes to effectively query over 10 million records from Cassandra database at web-scale.
- Horizontally scaled server layer across 3 AWS EC2 instances, leveraging Nginx as a load balancer.
- Performed stress testing using K6 and New Relic, achieved a throughput of 1000 requests/sec.

StyleSelector, Software Engineer - A full-stack online retail web app built with React, Express and PostgreSQL

- Followed agile practices to design and deploy a photo carousel and product preview microservice in 3 weeks.
- Worked collaboratively to deploy an additional 3 microservices on individual AWS EC2 instances with Docker.
- Optimized Google SEO performance score by 99%, with implemented gzip compression and image caching.
- Developed unit and integration tests with Jest and Enzyme, practiced TDD to achieve 92% code coverage.

Relevant Experience

RARA SOCIAL - Founding Software Engineer

2021

- Responsible for all aspects of frontend development including designing frontend application architecture (Redux Store and React component tree definition), folder organization and management, and component development
- Optimized both client and server websocket configurations to significantly improve application performance
- Integrated and managed client connections to the Ethereum network, including wallet verification and balance management using Web3.js. Integrate login support for Magic, MetaMask, and other WalletConnect providers.

SIDE PRJCT - Software Engineer

2021

- Fully remote team, based all over the world, following Agile development methodologies to design and build a
 professional development platform and community. Responsible for Front-end development.
- Followed atomic design principles, using React and Typescript, to improve code-reuse and ease-of-maintenance.
- Collaborated with Product and Design teams to develop the web app using tools like Figma and Zeplin.
- Synthesize user-feedback into actionable development goals with the help of Product and Design teams.
- Perform code reviews, participate in sprint planning, and assist in defining development workflows.

Hack Reactor - Lead Software Engineer in Residence, Toy Problem Q&A

2020-2021

- Lead a team of 7 software engineers working to identify improvements to curriculum and resident program.
- Supported students across a number of different campuses as a resident engineer. Assisted struggling pairs on any number of issues ranging from getting unstuck in their current sprint, to helping students reach a deeper understanding of Javascript, modern web development technologies, and Agile development.
- Hosted office hours twice a week where students are invited to ask questions (specifically) about any of the daily coding challenges they have completed as a part of their curriculum.

Chinatown Community Development Center - *Database Systems Administrator*

2015-2020

Education

Hack Reactor - Software Engineering Immersive

2020 2013

University of California, San Diego - Bachelor of Arts, Urban Studies and Planning, Sociology

Personal

Music enthusiast, AutoCAD hobbyist, sourdough baker before it was cool, cat person Favorite tabletop games include: Chess, Settlers of Catan, Bang!, Munchkin, Qwixx