Harrison **Lau**
Software Engineer

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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
- Full-stack engineer responsible for all aspects of app development including frontend architecture (Redux Store and React component tree definition and development), API design, session management, and data modelling.
- 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
University of California, San Diego - Bachelor of Arts, Urban Studies and Planning, Sociology   2013

Personal

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