

OLIVER CARLSON

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PROFESSIONAL EXPERIENCE

Waterford.org

Software Engineer, Full Stack

Remote

January 2021 - Present

- Designed and implemented REST API endpoints with Spring Boot, Java, JavaScript and TypeScript to evaluate children's reading and writing abilities, enhancing the scalability and accuracy of Waterford's educational platform.
- Integrated backend microservices with AWS SNS, SQS, PostgreSQL, and Elasticsearch to deliver data reliably and at scale, reducing latency and improving customer satisfaction.
- Ensured code quality and regression-free releases by implementing comprehensive unit and integration tests using JUnit, Jest, and Karma/Jasmine.
- Deployed code and infrastructure to production through our CI/CD pipeline using Git, Jenkins, Terraform, Serverless, and various infrastructure such as Lambda and EC2.
- Built reusable frontend libraries and an Electron application with JavaScript and lit-element, enhancing user engagement through interactive educational activities.
- Increased crash-free sessions from 92% to over 99% by implementing logging and error monitoring with Sentry.io and Matomo, enabling faster issue diagnosis and resolution.
- Improved the performance of high-traffic features by implementing caching, reducing API calls per session from over 7 to 1, and enhancing user experience.

Million Marker Wellness

Software Engineer, Mobile & Backend, Contract

Berkeley, CA, USA

January 2020 - March 2020

- Developed and deployed a cross-platform mobile application from scratch using React Native and Expo, successfully published on iOS (TestFlight) and Google Play.
- Designed and implemented scalable API endpoints with AWS API Gateway, Lambda, and S3, enabling users to seamlessly upload and store meal data and photos.
- Successfully managed technical scope and stakeholder expectations, delivering a functional product on a tight deadline, resulting in a successful VC pitch presentation.

SunPower Corporation

Software Engineer, Frontend, Contract

Remote

April 2019 - December 2019

- Developed a React/Redux web application with interactive visualizations, enabling customers to better understand energy bills and potential savings from switching to solar.
- Built API endpoints using Python, AWS S3 and Lambda's to support energy bill and savings visualizations, optimizing data retrieval for a seamless frontend user experience.
- Partnered with Product and Design teams to iterate and deploy new features based on customer feedback.

PROJECTS & OUTSIDE EXPERIENCE

Debugging Intermittent Test Failures with Karma and Jasmine

- Published a Medium article addressing intermittent test failures, sharing insights and strategies for resolving complex issues that slow down releases, based on hands-on experience with challenging cases.
- [Link to project](#)

EDUCATION

University of California - Berkeley

Bachelor's, Biology

May 2013