

OLIVER CARLSON

oswain@gmail.com Berkeley, CA

Backend-focused software engineer specializing in AWS microservices

Experience

WATERFORD.ORG

1/2021 - current

Software Engineer

Engineered core services for Waterford.org's new education platform

Languages: JavaScript/Node (primary), TypeScript, Java, Python

Technologies: AWS: Lambda, EC2, API Gateway, Postgres, SNS/SQS, Neptune, Elasticsearch, Spring Boot, Terraform, Serverless

Testing: Mocha/Jasmine, JUnit/Mockito, Jest

- Create REST API endpoints for use by client-side web and mobile applications with persistence depending on the use-case (e.g Postgres, Neptune, Elasticsearch).
- Use event-driven communication to keep service level data in-sync over AWS SNS and SQS.
- Implement new client logging software across a variety of services using Sentry.io and Matomo, to improve performance and reduce costs by deprecating previous services.
- Create shell scripts to automate setup of a service. Add documentation to provide context for each service, to decrease new hire onboarding time.
- Lead upgrades to Activity Service integration testing, to improve developer turnaround times on Activity Service tasks.

MILLION MARKER WELLNESS

1/2020 - 3/2020

Software Engineer (Contract)

Developed and released a mobile application to help users assess their microplastic exposure

Languages: JavaScript, Python

Technologies: React Native, Redux, AWS (Lambda, API Gateway, S3), Expo, Git, iOS Store Test Flight Deployment

Testing: Jest

- Generated a prototype application that allows users to monitor their daily caloric intake on a per-meal basis, upload photographs, and identify potential sources of microplastic exposure.
- Developed a backend of AWS lambda functions and S3 buckets to handle upload of images and JSON documents to persist user data.

SUNPOWER

4/2019 - 12/2019

Software Engineer, Front-end focused (Contract)

Created the entire front end of breakdownmybill.com

Languages: JavaScript, Python

Technologies: React, Redux, Nivo (data visualization), AWS (S3, Lambda, API Gateway, DynamoDB)

Testing: Jest, Enzyme

- Created a dashboard with graphs and over 40 reusable React components, to help customers better understand their solar bill and savings.
- Achieved 100% site functionality on a variety of browsers using BrowserStack.
- Wrote a Python script to filter out erroneous readings from a dataset of more than 50,000 solar interval readings per customer.

Education

University of California, Berkeley: Integrative Biology 2013

[Portfolio](#)

[Github](#)

[LinkedIn](#)

[Stack Overflow](#)