

(408) 886-4774 ajayrajamani@gmail.com PORTFOLIO GITHUB LINKEDIN

SKILLS Front-end: React, Redux, JavaScript, HTML, CSS, Sass, jQuery, AJAX, D3.js, Svelte.js

Back-end: Node.js, Express.js, Ruby on Rails, PostgreSQL, MongoDB, REST APIs, SQL, database ORM 's, Mongoose

General: Object-Oriented Design, Python, RSpec, Jest, Capybara, Git, Heroku, Webpack, GIS

PROJECTS

RunMappr (Rails, React, Redux, AWS, Google Maps API)

live | github

A route-map creation app for endurance sports with integrated workout tracker

- Designed an interactive route creation tool using React and the Google Maps API to allow users to easily log their workout routes and create new ones by drawing waypoints on a Google map
- Utilized the Google Directions API to automatically draw a route that follows streets and trails between waypoints
- Implemented a user auth system using BCrypt's hashing function to salt and securely store user passwords in the database
- Created a REST API using Rails to dynamically serve data to the front end while checking user authorization with each request to prevent malicious access

Bloom (MongoDB, Express.js, Node.js, React, Redux, Axios.js)

live | github

A personal goal-setting app that emphasizes positive reinforcement and integrates a visual reward system

- Engineered an interactive daily task list that allows drag and drop reordering of user tasks with React Beautiful DnD
- Created REST API endpoints using Express.js for all operations involving the database, including persisting changes to the database on each drag and drop
- Designed the MongoDB document schema for users, their habits, tasks, and rewards using Mongoose

Fire in the New Millenium (Javascript, GIS, Mapbox, D3.js)

live I github

A data visualization project that displays an interactive map of all large wildfires in the continental US from 2000 until 2018.

- Transformed a GIS dataset using QGis and Tippecanoe (a Mapbox utility) to shrink the data file size from 1GB to 61MB, allowing it to be displayed to the user as one unit
- Engineered an interactive slider by using Javascript event listeners to update the map with different fires based on the year selected by the slider
- Utilized D3.js to display aggregate fire data as an interactive bar graph with selectable axis

EXPERIENCE

Forestry Technician - Fire

US Forest Service, Tahoe National Forest

June 2017 - Nov 2019

- Served as a wildland firefighter on a Type 3 wildfire engine(1 season) and as a member of an Interagency Hotshot Crew, an elite team of 20 firefighters responsible for some of the hardest assignments on modern wildfires (2 seasons)
- Responded to rapidly evolving incidents while communicating effectively with crewmembers and supervisors in order to maintain control of hazardous work environments, such as uncontrolled wildfires and medevac efforts
- As a crew, successfully evacuated over 500 civilians from I-5 as it was being burned over by the 2018 Delta fire, before re-engaging the fire and saving a threatened neighborhood

Interpreter (Wilderness Guide)

Northern Tier High Adventure Bases

Summer 2015 and Summer 2016

- Spearheaded expeditions into the remote Quetico-Superior wilderness of Ontario, Canada, leading crews of youth aged 14-17 and adults aged 18-65 with over 55 satisfied participants
- Instructed participants in safe and ethical wilderness camping and rapidly responded to medical emergencies in order to maintain a perfect participant and staff safety record

EDUCATION

Full-Stack Software Engineering - App Academy | Spring 2020 **BS Ecology -** University of California, Davis | 2013 - 2017