RACHEL WEST

westrachel27@gmail.com | Rocky Mount, MO / Denver, CO | westrachel.com | github.com/westrachel

EXPERIENCE

Creator; Software Engineer   Jan 2023 - Current

Edamame (https://get-edamame.com)

Edamame is an open-source self-hosted distributed load testing framework designed for real-time collaboration apps.

- Led the design and development of a CLI tool (JavaScript/Node.js) that automates the provisioning and configuration of AWS roles and infrastructure (IAM roles, EC2 instances, EBS volumes, Application Load Balancer, EKS Cluster) needed to generate up to 200,000 concurrent virtual users in a load test.
- Led the design and development of a custom Go extension program for k6 and a custom Grafana dashboard (SQL/PostgreSQL) that allow users to emit, visualize, and analyze HTTP and WebSocket server performance metrics during load tests.
- Built an ETL pipeline (StatsD, custom JavaScript & Go programs, PostgreSQL, Grafana) capable of processing 2 million data points per second and visualizing that data in near real-time.
- Coordinated distributed load-generating nodes through utilizing the operator pattern and the Kubernetes API.
- Created a RESTful API with Express and configured a Kubernetes ingress to establish secure communication to and from the PostgreSQL database.
- Developed routes for the React UI that allow users to manage information about tests.
- Researched in detail how to build an effective load testing tool for real-time collaborations apps that use both HTTP and WebSockets by reading technical publications, watching tech talks, and interviewing working software engineers.
- Collaborated on an international remote team of 4 engineers.
- Authored detailed case study on the technical decisions and problems addressed by Edamame.

Full-Stack Web Developer   Jan 2021 - Current

Self-Employed

- **Endpoint Bin:** tool for inspecting webhooks built with JavaScript, React, Express, MongoDB, and PostgreSQL.
- **Training Log:** tool for tracking progressive overload training built with Ruby, Sinatra, and PostgreSQL.
- **Priority Planner:** tool for managing tasks built with Node.js, Express, JavaScript, and Handlebars.js.

Actuarial Quantitative Consultant   Aug 2019 - Nov 2022

Allstate Insurance Company

- Contributed to the design and development of an R Shiny application that streamlined quarterly pricing analyses for 9 different property and casualty lines in collaboration with a team of nine 5 hours per week.
- Developed an R Shiny application that reduced the time to process homeowner data and create DOI compliant Nevada homeowner rate filing materials from a full workday to under 10 minutes.
- Conducted pricing analyses and prepared communications for business partners summarizing trends, rate competitiveness, rate adequacy, and proposals for future rate actions for 6 different lines of insurance for the Southwest and Capital regions.

SKILLS

Languages & Frameworks: JavaScript, Ruby, SQL, Golang, TypeScript, R, Express, Sinatra

AWS: EKS Cluster, EBS, EC2, IAM, Application Load Balancer

Other Technologies: Git, GitHub, Kubernetes, Docker, PostgreSQL, MongoDB, Node.js, React, Postman, RESTful APIs, HTML, CSS, DigitalOcean (Droplets), Nginx, Heroku

EDUCATION

The University of Chicago   2015 - 2019

Bachelor of Arts in Economics with honors; GPA: 3.85/4.00