RACHEL WEST

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

EXPERIENCE

Creator; Software Engineer

Jan 2023 - Current

Edamame (https://edamame-load-test.github.io/)

- Researched, designed, and implemented Edamame, an open-source self-hosted distributed load testing framework specifically configured for real-time collaboration apps that use both HTTP and WebSocket protocols.
- Automated the provisioning and configuration of AWS roles and infrastructure (IAM roles, EC2 instances, EBS volumes, AWS Load Balancer Controller, EKS Cluster) needed to generate up to 200,000 concurrent virtual users in a load test.
- Built an ETL pipeline capable of processing 2 million data points per second.
- Extended the k6 Experimental WebSockets module by writing additional logic in Go to emit metrics that provide insight
 into WebSocket server performance under load.
- Developed a custom Grafana dashboard that uses SQL queries to display relevant performance metrics for HTTP and WebSockets.
- Built a CLI tool using Node.js and a React GUI that allow users to conduct load tests with Edamame's infrastructure.
- Collaborated on an international remote team of 4 engineers.
- Authored detailed <u>case study</u> 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 React, Express, MongoDB, and PostgreSQL.
- Training Log: tool for tracking progressive overload training built with Ruby, Sinatra, and PostgreSQL.

Actuarial Quantitative Consultant

Aug 2019 - Nov 2022

Allstate Insurance Company

- Collaborated on a team of nine 5 hours per week to build an R Shiny application that streamlined quarterly pricing
 analyses for 9 different property and casualty lines.
- 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, TypeScript, Golang, SQL, Ruby, R, Express, Sinatra
- **AWS:** EKS Cluster, EBS, EC2, IAM, AWS Load Balancer Controller
- Other Technologies: Git, Github, Kubernetes, Docker, PostgreSQL, MongoDB, Node.js, React, Postman, RESTful APIs, HTML, CSS, DigitalOcean (Droplets), Nginx

EDUCATION

Launch School Capstone Program

2021 - 2023

Multi-year full-stack software engineering curriculum focused on the mastery of fundamentals.

The University of Chicago

2015 - 2019

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