

Miguel Angel Zamarripa Rodriguez

San Diego, CA | (619) 376-8306 | miguelazamarripa@gmail.com

Portfolio: www.mzamarri.dev | LinkedIn: www.linkedin.com/in/mzamarri

Education

University of California, Santa Barbara

Sep 2015 – Sep 2020

Bachelors of Science in Physics and Mathematical Science

Experience

Software Developer, Independent Contractor

Nov 2025 – present

- Lead development of a web application for a bounce house party rental business looking to establish an online presence, showcase services, and streamline customer inquiries and bookings process.
- Collaborated directly with the client to gather requirements and define product features, translating business needs into an 11 page web application using Typescript, React, React Router and TailwindCSS.
- Integrated a headless CMS using Contentful's GraphQL API to support inventory and content management.
- Created 4 HTML email templates and used EmailJS REST API to automate email sending for contact form and booking request confirmation, facilitating customer communication and booking process.
- Leveraged AI tools for development workflow, using loveable to enhance UI design, Copilot and Codex to help debug, refactor and develop code snippets, and ChatGPT for image and text generation.

System Test Engineer, Qualcomm

June 2022 – Dec 2022

- Automated manual efforts for test setups using bash, reducing time from 2-5 minutes to 10-40 seconds.
- Executed 300+ test cases and collaborated with cross-functional teams to uncover system-level software issues, detecting, tracking and verifying fixes of 20+ defects. Also, performed benchmark testing for power across 100 use cases, revealing an issue where lower FPS consumed more energy than higher FPS.

Projects

Django Dealership Review Management System

- Developed a django app with 6 REST endpoints that integrates 2 microservices and an SQLite database, enabling users to browse dealerships by state, view car information and submit customer reviews.
- Modeled vehicle database schema using django ORM to support dealership inventory and vehicle lookup.
- Built an ExpressJS and MongoDB dealership and review microservice, and a sentiment analysis service for classifying user reviews, providing users with meaningful insights into the dealership experience.
- Created a user account system using Django authentication and React, allowing users to securely register accounts, sign in, submit reviews and manage authentication sessions.
- Configured 2 Github Actions CI workflows for automated Python and Javascript linting, then containerized and deployed the application with docker and kubernetes on IBM Cloud.

Full Stack E-Commerce Single-Page Application

- Built an SPA with custom client-side routing using HTML, CSS and Javascript for the frontend, and developed a REST API using ExpressJS to serve catalog data, manage cart actions and submit customer orders.
- Designed PostgreSQL schema (tables, views, functions and procedures) and created an object-oriented data access layer in ExpressJS using pg client to persist and retrieve cart, catalog and order history data.
- Deployed application on AWS EC2, configuring VPC and enabling HTTPS using Lets Encrypt and Certbot CLI. Implemented Docker to scale Nginx web server, ExpressJs and PostgreSQL services independently.

Technical Skills

Languages & Scripting: Typescript, Javascript, Python, Java, C++, SQL, Bash

Frameworks & Libraries: React, React Router, Tailwind CSS, ExpressJS, Django

Databases & APIs: NodeJS, GraphQL API, REST APIs, PostgreSQL

Tools & Platforms: Git, Github, Docker, Kubernetes, Vercel, AWS, IBM Cloud, Nginx