Jim Alexsander Galvan

Software Engineer - Backend, Distributed Systems & AI

jimmy-galvan@live.com.mx | 619-717-4813 | San Diego, CA | jimgalvan.github.io

Summary

Software Engineer building production distributed systems and AI-powered applications across C#, Java, and Python. Experienced with microservices, event-driven architectures, databases, and cloud infrastructure, with hands-on experience in LLM systems, agentic AI, and applied machine learning/computer vision.

Skills

Backend & APIs	C#, Python, Java, ASP.NET Core, REST APIs, FastAPI, Quarkus
Cloud & Distributed Systems	Azure Service Bus, Microservices, Event-Driven Architecture
AI & ML	Agentic AI, RAG, Tool Calling, PyTorch, Computer Vision, YOLOv8, LLM, MCP
Observability & Performance	.NET Aspire, Datadog, Distributed Tracing, Structured Logging, Performance Optimization
DevOps & Infrastructure	Docker, Kubernetes, Azure Pipelines, Linux, AWS
Databases	PostgreSQL, Redis, SQL, Vector
Testing	Postman, Playwright, Pytest
Frontend	Vue.js, TypeScript, HTML, Single-Page Applications

Experience

Alphatec Spine — Carlsbad, CA
Software Engineer — 11/2023 - Present

- Design and develop production .NET microservices and RESTful APIs for a medical (HIPAA-compliant) cloud platform using ASP.NET Core, PostgreSQL, Redis, and Azure services while following Clean Architecture principles and coordinating contracts across frontend, embedded, and mobile teams.
- Participate in code reviews and system-design sessions and mentor engineers on backend design, debugging, and reliability best practices.
- Redesigned a distributed workflow spanning three backend services to eliminate race conditions by implementing idempotent operations, resilient error handling, and explicit state-transition management, significantly reducing production incidents and inconsistent system states.
- Troubleshoot and resolve production incidents through structured log analysis in Datadog, root-cause investigation with Application Insights, and analysis of asynchronous workflows, service interactions, and failure propagation.
- Improve API performance by optimizing queries, adding targeted indexes, and implementing Redis caching for frequently accessed data.
- Contribute to frontend development by integrating REST APIs with Vue.js and TypeScript components.

Ace Parking — San Diego, CA
Software Engineer - DevOps & Automation — 08/2021 - 11/2023

- Rebuilt and maintained CI/CD pipelines using Jenkins, Groovy pipeline scripting, Docker, and Ubuntu Linux environments in AWS after inheriting unstable deployment infrastructure, improving deployment reliability, automation coverage, and build stability across multiple products.
- Developed API automation and integration-testing workflows using JavaScript and Postman to validate backend endpoints and service integrations.
- Built and maintained scalable browser automation frameworks using Selenium, Java, JUnit, and Katalon to support large-scale regression testing and reduce manual validation efforts.

Dexcom — San Diego, CA
Software Test Development Engineer I — 01/2020 - 08/2021

- Performed functional and integration testing for BLE and Wi-Fi-enabled glucose monitoring devices and companion mobile applications within a regulated medical-device environment.
- Developed and maintained mobile automation frameworks for iOS and Android using Java, JUnit, and Appium to improve regression coverage and reduce manual testing effort.
- Collaborated with software engineers, QA teams, and project managers in Agile/Scrum environments to support feature validation, release readiness, and cross-functional delivery.

Projects

Backlogr

Built and deployed an AI-assisted SaaS platform that helps developers, QA engineers, and product owners refine software tickets before implementation. Backlogr analyzes issues, comments, screenshots, and indexed source code to uncover missing requirements, ambiguous behavior, edge cases, and relevant implementation files. Designed the three-service architecture using LLM-based agent workflows, RAG, Voyage AI, ChromaDB, Quarkus, FastAPI, Angular, and Redis.
https://backlogr.dev

NexMenus

Built and deployed a customer-facing SaaS platform with an AI agent that turns conversational business input into structured menu and storefront data. Engineered the agent and tool-calling workflow in Java 21/Quarkus, exposed menu-creation tools through an MCP server for external AI clients, and built the interactive frontend with Angular and TypeScript. Worked directly with users to troubleshoot issues, refine requirements, and improve the product.
https://nexmenus.com

Sumo Car

Built a multiplayer 3D driving game with realistic steering, acceleration, and collision physics powered by Rapier. Player positions are synchronized through WebSockets to a Rust backend that manages sessions and keeps the shared world in sync.
https://sumo-car.vercel.app

Education

UC San Diego Extended Studies — San Diego, CA
Computer Software Engineering - Java Programming — 2019 - 2020

Certifications

AWS Cloud Technical Essentials — 2024
AWS / Coursera
coursera.org/account/accomplishments/verify/EB47WCVR972T