

ROY GONZALEZ

Principal Architect · Software Architecture & Distributed Systems

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PROFESSIONAL SUMMARY

Software architect and engineer with 18+ years building and designing enterprise-scale platforms, including mission-critical trading systems, logistics integration platforms, and cloud-hosted enterprise products. Deep, sustained expertise in distributed systems, microservices, Domain-Driven Design, and event-driven architecture (actor model), backed by 7 years of independent research and open-source work. Proven record defining architectural standards, reducing technical debt, leading cloud and CI/CD adoption, and mentoring engineers and architects in TDD, BDD, and architectural principles. Experienced with TOGAF-based enterprise architecture and agile delivery across US and Latin American teams.

CORE ARCHITECTURE COMPETENCIES

Architecture: Enterprise Architecture (TOGAF) · Solution Architecture · Distributed Systems · Microservices · Domain-Driven Design (DDD) · Event-Driven & Actor-Model Architectures · Evolutionary Architecture · API Integration · Publish-Subscribe & Messaging Patterns · SOLID

Platform & Cloud: Kubernetes · Helm · Containers · Cloud-Native Design · CI/CD & DevOps · Continuous Delivery · High Availability & Fault Tolerance · Observability & Monitoring

Languages & Data: .NET / C# · Go · Python · JavaScript / React · Java · SQL Server · Oracle · Apache Spark · Mondrian · Analysis Services

Leadership: Technical Mentoring · Architecture Standards & Governance · Tech-Debt Reduction · Scrum / Agile Adoption · Design Thinking · TDD / BDD Coaching

PROFESSIONAL EXPERIENCE

Software Developer | QAT Global

Jul 2025 – Present

Costa Rica · Remote — Nearshore custom software development for US enterprise clients

- Deliver custom enterprise software solutions for US clients, contributing design and implementation expertise across the stack.

Software Developer | EagleView

Aug 2023 – Jun 2025

United States · Remote — 3D modeling / CAD / GIS platform

- Built CAD tooling for 3D architectural modeling (extrusion, scaling, structure creation) with JavaScript, Python, and Three.js, integrating models into GIS environments via MapView.
- Optimized geometry-processing workflows and user experience in complex interactive 3D tools.

Principal Software Engineer | TradeStation

Jan 2020 – Jun 2023

Costa Rica · Remote — Mission-critical online trading platform (US fintech)

- Designed and evolved microservices for a high-availability, mission-critical trading platform using .NET, Go, and Kubernetes, where reliability, low latency, and fault tolerance were core architectural drivers.
- Led feature architecture and supported production services at scale, applying distributed-systems patterns, containerized deployment with Helm, and agile delivery practices.

Software Developer | Mobilize.Net

Nov 2016 – Jul 2019

Costa Rica — Code-migration products

- Shaped product development across design, quality, agile process, and continuous delivery.

Software Architect | Aurea Software

Jun 2015 – Nov 2016

United States · Remote — Enterprise software, cloud hosting at enterprise scale

- Identified and remediated technical debt across enterprise products using proprietary architectural assessment methods; led performance optimization initiatives.
- Architected the migration from SQL Server Integration/Analysis Services to Mondrian and Apache Spark, modernizing the analytics platform.
- Led the adoption of continuous delivery, simplified build processes, and component design; mentored teams on tech debt, unit/behavior testing, code standards, and architectural principles.

Software Architect | Accenture

Sep 2013 – Jun 2015

Heredia, Costa Rica — Enterprise consulting

- Designed a modular architecture on EPiServer (Add-On modules) creating a reusable component library shared across multiple sites — driving reuse, interoperability, and consistency.
- Applied TOGAF to provide an enterprise-architecture view and mature the application lifecycle; introduced Scrum, SOLID principles, TDD, continuous integration, and Octopus-based deployment.

Software Engineer | Isthmus (DHL account)

Jan 2010 – Sep 2013

Costa Rica — Logistics integration systems

- Built enterprise integration systems for DHL using publish-subscribe patterns and WCF interoperability; performed business analysis on DHL's logistics core and data analysis with Analysis Services.

Software Engineer / Architect | GPI Consultores · GPS Satellite

Mar 2006 – Jan 2010

Costa Rica — Logistics, banking, and GPS telematics

- Developed Single Sign-On middleware, DHL trade/tracking applications, and e-commerce systems; led maintenance team for a credit-card platform (Citibank); trained teams on BizTalk Server.
- Built distributed systems integrating GPS devices over TCP/IP-UDP with real-time data processing.

RESEARCH & OPEN SOURCE — MLAMBDA (2019 – PRESENT)

- Founded an independent research initiative on microservices, DDD, BDD, containers, CI/CD, and Kubernetes; author of MLambda.Actor, an open-source actor-model framework for .NET (github.com/mlambda-net).
- Designed and published reference microservices (identity, store) and a React e-commerce front end, exploring bounded contexts as the foundation for microservice boundaries.

EDUCATION

BS, Computer Software Engineering · Universidad Nacional, Costa Rica

2002 – 2006

Bachelor's, Philosophy of Formal Science · Universidad Nacional, Costa Rica

2002 – 2006

LANGUAGES

Spanish (native) · English (advanced — 10+ years working remotely with US teams)