

Ivan Acosta-Rubio

Staff Software Engineer | Platform & AI Infrastructure

Miami, FL | US Citizen (No sponsorship required) | Remote (US Eastern) 17+ years experience | Open to Senior Staff/Staff/Principal roles

Schedule a Call | GitHub | Twitter Portfolio: <https://www.softwarecriollo.com>

Executive Summary

Staff Software Engineer with 17+ years building scalable platforms, distributed systems, and AI-powered infrastructure. Proven track record of architecting internal platforms serving 35+ engineers, designing high-throughput systems processing \$10M+ in annual revenue, and leading technical strategy across multiple organizations. Expert in platform engineering, AI/ML infrastructure, and backend architecture with measurable business impact through developer productivity and system reliability.

Core Competencies

Platform Engineering: Internal Developer Platforms, SDK Development & Auto-generation, CLI Tools, Developer Tooling, Self-Service Infrastructure, API Platforms, Testing Frameworks, OpenAPI Integration

AI/ML Infrastructure: RAG Systems, LLM Integration (OpenAI GPT-4, Anthropic Claude), Multi-modal AI Pipelines, Computer Vision, Production ML Systems, Prompt Engineering, Context Engineering, AI-powered Automation

Backend & Distributed Systems: Microservices Architecture, Event-Driven Systems, High-Throughput APIs, Database Architecture (PostgreSQL, Redis), System Design, Performance Optimization, Fault-Tolerant Systems, Scalability Engineering

Technical Leadership: System Architecture, Technical Strategy, Team Leadership (2-35 engineers), Engineering Culture, Technical Mentoring, Code Review Standards, Cross-functional Collaboration, Stakeholder Management

Cloud & DevOps: AWS (Lambda, EC2, S3, RDS), Serverless Architecture, Docker, CI/CD Pipelines (GitHub Actions, Jenkins), Infrastructure as Code, Monitoring & Observability, Site Reliability

Programming Languages: TypeScript, Python, Ruby, Rust, JavaScript, Swift

Tools & Technologies: Deno, Node.js, Bun, REST APIs, GraphQL, Git, PostgreSQL, Redis, SQLite

Experience

Strike | Lead Test Engineer (Staff-level IC)

2021 - October 2025 | Remote

Platform Engineering & Architecture: - Architected and built **SITS (Strike Integrated Testing Strategy)**, a comprehensive internal developer platform serving **35+ engineers across 4 teams** (Platform, Trust & Safety, Consumer, Data) - Designed full-stack platform using **TypeScript/Deno, PostgreSQL, AWS serverless** infrastructure with microservices architecture for distributed test execution - Built **self-service CLI tooling** that auto-generates SDKs from OpenAPI specs with integrated testing

facades, enabling **40+ developers** to write and execute tests independently - Established engineering best practices, code review standards, and technical documentation processes adopted across engineering organization

AI/ML Infrastructure Development: - Engineered **RAG (Retrieval-Augmented Generation)** system using Anthropic Claude and OpenAI GPT-4 for automated test generation from product requirements - Built document parsing pipeline extracting structured data from Markdown, Confluence, and Notion using NLP preprocessing - Created PostgreSQL-backed version control system for test case evolution tracking across product iterations - Integrated with GitHub Actions CI/CD for automated PRD validation and test coverage analysis - Built **multi-modal AI pipeline** combining GPT-4 Vision API with custom TypeScript orchestration for video-to-test automation - Developed intelligent YAML generation engine translating visual interactions into executable test syntax - Deployed as serverless function on AWS Lambda with S3 storage, processing 50+ videos weekly - Achieved 95% accuracy in test generation with context-aware prompt engineering

Business Impact & Results: - **Reduced test creation time by 65%** (8 hours → 2.8 hours per feature) while improving quality across teams - **Eliminated 30+ hours of manual work weekly** through AI-powered automation and developer self-service - **Increased test coverage to 78%** and reduced regression testing from 4 days to 6 hours - **Reduced API testing time by 80%** through intelligent test generation matching mobile app behavior

ZR Per Diem Services | Principal Software Engineer

February 2017 - 2021 | New York, NY

Backend Systems & Architecture: - Architected mission-critical financial platform processing **\$10M+ in annual revenue** with microservices architecture - Designed and implemented **high-throughput data pipelines** handling **15,000+ transactions daily** with real-time processing - Integrated **12+ third-party APIs** (payment processors, banking systems) with fault-tolerant retry logic and circuit breakers - Built **fault-tolerant distributed systems** achieving **99.7% uptime** for business-critical operations - Implemented comprehensive monitoring, alerting, and incident response procedures for production systems - Designed database architecture optimized for high-throughput financial transactions with ACID compliance

SoftwareCriollo | Founder & Staff Software Engineer

May 2008 - January 2017 | Miami, FL

Technical Leadership & Business Growth: - Founded and scaled technology consultancy from **2 to 23 engineers**, establishing engineering culture and technical standards - Led technical architecture and development for **35+ full-stack applications** serving **500K+ users** as Staff Software Engineer - Managed P&L responsibility, client relationships, and business development while maintaining hands-on technical leadership

Backend & Platform Engineering: - Architected scalable backend systems using **Ruby on Rails, TypeScript, PostgreSQL, Redis** with microservices patterns - Designed database systems with query optimization achieving **<100ms response times** under high load - Built comprehensive **CI/CD pipelines** using GitHub Actions, Jenkins, Travis CI - reduced deployment time from hours to minutes - Implemented DevOps infrastructure: Docker containerization, automated testing, monitoring solutions, zero-downtime deployments - Managed AWS cloud infrastructure (EC2, RDS, S3, Lambda) handling **millions of API requests monthly** - Led ops-heavy initiatives: database migrations, incident response procedures, performance optimization

Open Source & Community: - Released multiple open source libraries and tools adopted by Ruby community - Speaker at international conferences (RubyConf Brasil, Inspect SF)

Education & Continuous Learning

Self-Taught Engineer with 17+ years of hands-on experience building production systems

Continuous Learning & Certifications

- University of Washington - Machine Learning Foundation (2016)
- Active contributor to open source communities
- Speaker at international tech conferences (RubyConf Brasil, Inspect SF)
- Published technical author on iOS, Swift, and AVFoundation

Formal Education

- Miami Dade College - Associate of Arts (2005-2007)
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Talks & Publications

- **Object Replication in Active Record** - RubyConf Brasil - Watch Talk