

Jose Raul Alfaro

Senior Full Stack Developer | Backend Architect | AI Engineer

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PROFESSIONAL SUMMARY

Senior Full Stack Developer, Backend Architect and AI Engineer with 10+ years delivering backend, cloud, web and mobile products from architecture to production. Strong background leading backend architecture, APIs, microservices, databases, integrations, AWS infrastructure and business-critical services.

3+ years designing and building production AI systems with LLMs, RAG, MCP servers, embeddings, vector databases, semantic search, hybrid retrieval, observability, evaluation and agentic workflows. Experienced owning technical decisions, working with business stakeholders and delivering reliable software from concept to production.

CORE STRENGTHS

- Backend architecture, API design, microservices, database design and production system ownership.
- AI engineering focused on RAG, LLM applications, MCP servers, agentic workflows, embeddings and vector search.
- Technical leadership as Backend Lead / Backend Architect, mentoring teams and translating business needs into working systems.
- Full stack delivery across web, mobile, backend, cloud, automation, data pipelines and third-party integrations.
- Production-minded engineering: observability, evaluation, retries, validation, maintainability and cost-aware design.

TECHNICAL SKILLS

AI Engineering: RAG, LLM Engineering, Agentic AI, OpenAI APIs, LlamaIndex, LangChain, LangGraph, MCP, Embeddings, Vector Databases, Semantic Search, Hybrid Search, Prompt Engineering, Phoenix by Arize AI, Langfuse, DeepEval, NeMo Guardrails

Backend & Architecture: Node.js, Python, TypeScript, JavaScript, GraphQL, REST APIs, Microservices, System Architecture, API Integrations, Data Processing, MCP Server Development

Cloud, Data & Automation: AWS, Google Cloud, Docker, Kubernetes (k8s), PostgreSQL, PostgreSQL Vector Search, Milvus, MSSQL, MySQL, MongoDB, Elasticsearch, Redis, n8n, Make, Firecrawl, Microsoft Graph API, ETL Pipelines

Frontend & Mobile: React, React Native, Angular, Ionic, HTML5, CSS3, PhoneGap, Mobile UX, Push Notifications

PROFESSIONAL EXPERIENCE

Advison | Full Stack Developer / Software Architect / AI Engineer *2019 - Present*

Own architecture and delivery for backend, cloud and AI-enabled product work, combining years of backend leadership with hands-on development across APIs, databases, microservices, AWS infrastructure and production systems. Worked as Backend Lead and Backend Architect, developing product features, maintaining business-critical services and later building RAG, MCP and automation solutions for sports betting, SEO content generation and internal operations.

- Led backend architecture and maintenance across multiple services, databases and APIs, supporting scalable product features and reliable production delivery.

- Acted as Backend Team Lead, overseeing microservices, databases, APIs, backend services and AWS infrastructure.
- Architected and developed AI systems with LlamaIndex, custom MCP servers, PostgreSQL vector search, GraphQL integrations, Phoenix observability, DeepEval evaluation and NeMo Guardrails.
- Built AI-powered products including Oddstrader BetStation, SEO Content Generator and sports event automation workflows.
- Automated business workflows with n8n, OpenAI, Firecrawl and Node.js, replacing manual sports event management processes with reliable validation and database operations.

Malt.com | AI Engineer Consultant 2026 | *Freelance AI consultant*

Designed and implemented internal AI agents for enterprise knowledge retrieval and report discovery, taking ownership of RAG architecture, ingestion, retrieval strategy, evaluation and integration through a custom MCP server.

- Built ingestion pipelines for Tableau, Power BI, internal documents and SharePoint using Microsoft Graph API, LLM enrichment, OpenAI embeddings and Milvus.
- Implemented hybrid search combining semantic similarity and tag-based retrieval, with LangChain as the main framework and Langfuse for observability and evaluation.
- Connected reporting and knowledge agents to a shared MCP server consumed by a main LLM orchestrator using a tool-as-agent approach.

Workana.com | Freelance Developer 2015 - 2018

Delivered end-to-end client products as an independent full stack developer, covering requirements, UX/UI, mobile development, backend services, database modeling, API design, deployment support and third-party integrations.

- Built production mobile and web applications for booking, business management, loyalty rewards, delivery commerce and academic tracking.
- Integrated Google Maps, social login, push notifications, QR flows, payment/order logic and REST APIs across Android, iOS and web experiences.
- Delivered projects including YourBeauty, EcoVen, Bar2me and VIA using Ionic, Angular, Node.js, PHP, MySQL, PhoneGap, HTML5, CSS3 and JavaScript.

Smartsoft | PhoneGap Developer 2014

Worked on a PhoneGap-based mobile application, improving usability, stability and maintainability while strengthening the foundation for later cross-platform mobile and full stack delivery work.

- Gained early production experience with hybrid mobile applications, HTML, CSS, JavaScript and mobile app maintenance.

EDUCATION

- Master's Degree in Big Data and Business Intelligence - 2026
- Bachelor's Degree in Systems Engineering - 2010 - 2014