

Francisco Revelles

AI Systems Architect & Founder (CTO Capacity)

Greater Boston

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SUMMARY

AI Systems Architect and technical executive specializing in the design of **high-integrity, interpretable, and scalable AI systems**. Grounded in Mathematics and distributed systems engineering, with a focus on **deterministic AI orchestration**, enterprise integration, and audit-ready automation. Experience spans consumer products, defense, fintech, and legal-tech environments where correctness, traceability, and reliability are non-negotiable.

- **Founder / CTO Competency:** Founder of the LexFabric multi-agent automation platform; former Founding Technical Lead for a zero-to-one consumer marketplace.
 - **Core Specialization:** Multi-agent orchestration connecting LLMs (Gemini, GPT-4o) with Systems of Record using algebraic and deterministic verification techniques.
 - **Technical Stack:** Python (FastAPI), Java (Microservices), PostgreSQL, LLMs, Vector Databases, AWS, Kubernetes.
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CORE COMPETENCIES

AI Systems Architecture

Multi-Agent Orchestration · LLM Integration (Gemini, GPT-4o) · Neuro-Symbolic AI
Deterministic Verification · Algebraic Modeling · Python Automation

CTO / Product Leadership

Startup Founding · Zero-to-One Product Delivery · Technical Roadmaps · Cloud Strategy (AWS, Kubernetes) · Cross-Domain Compliance (FinTech, Legal-Tech, Defense)

Distributed Systems

Python (FastAPI) · Java Microservices · Event-Driven Architectures · PostgreSQL · Enterprise Integration Patterns · High-Availability Systems

EXPERIENCE

LexFabric

Founder & CTO | AI Systems Architect

Boston, MA | November 2025 – Present

- Architected and built a **distributed, multi-agent knowledge system** (Python/FastAPI) integrating Systems of Record, Systems of Engagement, and an Intelligence Layer for complex workflow orchestration.
- Designed and implemented a **multi-agent orchestration framework** coordinating Gemini and GPT-4o as reasoning engines for high-stakes document extraction and cross-validation.
- Applied **algebraic and deterministic validation logic** (hashing, graph constraints, schema enforcement) to ensure LLM outputs are predictable, auditable, and enterprise-safe.

Boulou Services

Founding Technical Lead | Full-Stack Architect (CTO Capacity)

Greater Boston | October 2022 – June 2024

- Served as the **lead technical executive** for a zero-to-one automotive services marketplace, owning the full engineering lifecycle through launch readiness.
- Designed and deployed **scalable AWS infrastructure** (EC2, Lambda, RDS) emphasizing high availability and cost optimization.
- Engineered a secure **multi-party payment platform** using Stripe Connect, supporting complex fund routing and transactional compliance.

Professional Services

Principal Consultant | Distributed Systems & Enterprise Integration

Remote | January 2017 – November 2025

- Led **monolith-to-microservices transformations** for enterprise clients in Finance and Healthcare, re-architecting legacy Java systems into fault-tolerant Spring Boot services.
 - Built **secure interoperability layers** (Spring Batch, OAuth2/OIDC) connecting heterogeneous systems including mainframes and cloud platforms.
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Kessel Run (U.S. Defense Sector)

Senior Software Engineer

Boston, MA | May 2020 – October 2021

- Engineered cloud-native microservices that **reduced F-35 squadron planning time from days to minutes**, optimizing complex resource-allocation workflows in a zero-failure environment.
 - Led decomposition of monolithic logic into **Spring Boot microservices on Kubernetes**, compliant with strict DoD security requirements.
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Pearson

Senior Software Engineer | Cloud-Native Platforms

Boston, MA | December 2018 – December 2019

- Designed and implemented **decoupled RESTful microservices** replacing brittle legacy integrations and supporting peak academic traffic.
 - Defined and provisioned infrastructure using **Terraform on AWS** (EC2, RDS, VPC) to ensure reproducible and audit-ready environments.
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SELECTED SYSTEMS ARCHITECTURE HIGHLIGHTS

- **Grupo Santander (Lead Systems Engineer):** Unified international payment gateways (SWIFT / SEPA), integrating J2EE middleware with core mainframe banking ledgers to preserve transactional integrity.
- **Northeastern University (Senior Integration Engineer):** Architected backend services for the *Live Score* platform, delivering low-latency APIs for thousands of

concurrent users.

- **Asset Securitisation (Solution Architect):** Modeled complex financial workflows using jBPM, implementing deterministic state machines aligned with modern multi-agent orchestration principles.
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EDUCATION

University of Puerto Rico, Río Piedras

Bachelor of Science — Computer Science and Mathematics
1998 – 2003

LANGUAGES

Spanish — Native / Bilingual
English — Native / Bilingual