

Sami Horani

Principal Software Engineer / Systems Architect
Greater Los Angeles Area (Remote-Friendly)
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SUMMARY

Principal / Staff-level Software Engineer and Systems Architect with 20+ years of experience designing and operating platform-grade, data-intensive systems across fintech, digital commerce, and enterprise environments. Specialized in financial data platforms, risk modeling, secure APIs, and reliability engineering, with a strong emphasis on data integrity, and long-term system evolution. Proven track record of reducing operational risk and delivering measurable business impact.

CORE EXPERTISE

Platform Engineering · Distributed Systems · Financial Data Systems · Risk Modeling & Monte Carlo Simulation ·
API Design, Security & Access Control · Data Pipelines & Normalization · Reliability Engineering & Observability ·
Cloud-Native Architecture · Python Backend Engineering

PROFESSIONAL EXPERIENCE

Principal Software Engineer / Systems Architect
Self-Employed | May 2024 – Present

Architect and operator of platform-grade financial and data systems focused on analytics, risk modeling, and secure APIs. Responsible for end-to-end system design, from canonical data models and processing pipelines to authentication, deployment, and operational reliability.

Selected Systems & Platforms

Financial Data Normalization & Analytics Platform

Designed canonical data models and idempotent processing pipelines to ingest, normalize, and reconcile multi-year brokerage and transaction data. Emphasized, traceability, and schema evolution to support portfolio performance reporting and cash-flow analysis.

Monte Carlo Portfolio Simulation & Risk Analysis Engine

Built a probabilistic simulation engine to model long-horizon portfolio outcomes, return distributions, drawdowns, and sequence-of-returns risk. Enabled scenario analysis and decision support via analytical APIs and visualization layers.

Transaction Categorization & Merchant Normalization System

Developed a transaction-processing subsystem to classify and normalize noisy credit card data into consistent merchant and category taxonomies. Designed deterministic parsing and refinement workflows optimized for explainability and incremental accuracy improvements.

Secure API & Access Control Framework

Architected a reusable API foundation with JWT-based authentication and role-aware authorization supporting protected analytical and administrative workflows.

Principal Software Development Engineer
AT&T | Jul 2015 – May 2024

Led the architecture and delivery of a platform-grade observability and reliability engineering system supporting large-scale digital services. Designed and evolved an AI-assisted operations (AIOps) platform to improve availability, accelerate incident response, and reduce operational risk across distributed applications.

Architected a centralized observability platform integrating metrics, logs, and operational signals across heterogeneous systems, enabling real-time visibility and historical analysis. Built automated diagnostics and self-healing workflows to reduce MTTR and mitigate recurring failure patterns.

Impact Highlights

- Achieved 80%+ reduction in outage minutes for onboarded applications
- Delivered 10% YoY reduction in outage minutes, resulting in ~\$700K annualized savings
- Enabled 60% reduction in outage minutes through automation, producing \$6M+ annualized savings

Principal Software Engineer
DIRECTV | Jun 2004 – Jul 2015

Led platform-level engineering initiatives focused on API strategy, access control, and system integration supporting large-scale digital and operational systems.

Drove enterprise-wide API adoption, modernizing legacy services into standardized, secure REST APIs and enabling integration across internal platforms and external partners. Designed access control and credential lifecycle automation to reduce security risk, improve compliance, and eliminate manual operational overhead.

TECHNOLOGY

Python · FastAPI · REST APIs · JWT · Pandas · SQL · Docker · Linux · CI/CD · Observability Platforms

EDUCATION

Bachelor's Degree in Computer Science (details available upon request)