

Joseph Leporati

Senior Full-Stack Engineer · Technical Program Manager

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SUMMARY

Sixteen years designing, building and running production systems where failure is expensive: commission and payout platforms for 500K+ users at 99.9% uptime, a real-time gameshow backend for 20K+ concurrent players, payroll for 10K+ clients, and citation-first AI for local government. I own architecture and delivery end to end. About half of my 8,492 commits since 2019 are co-authored with Claude, delivered through specs, adversarial review and a human gate before production.

EXPERIENCE

Plondo Network

Mar 2012 to present

Full-Stack Developer and Technical Program Manager

- Designed and operate the direct-sales back office behind a family of brands: sales tracking, genealogy trees, commission runs and payouts for 500K+ users at 99.9% uptime.
- Ended a production outage that pinned responses at 11 seconds, then led the performance program: p90 latency down 47% (2.21 s to 1.17 s), worst case under 6 s, dashboard abandons from 449 per six hours to zero, and \$1,400 to \$2,100 a month in infrastructure savings identified.
- Put a priority-queued AWS Lambda and SQS layer in front of inbound webhooks so traffic spikes can no longer take down the core application.
- Led two ground-up rebuilds in 2026 with Claude as co-engineer: a serverless, white-label, multi-tenant back office (1,000+ commits in 30 days) and a multi-tenant commerce and commission platform (430+ commits and 1,595 tests in 11 days).
- Designed for correctness where money moves: append-only double-entry ledger, integer-cent arithmetic, idempotency keys, golden-master tests that keep commission output byte-identical, and a Postgres role per tenant with `SET LOCAL ROLE` after a probe proved `search_path` does not isolate tenants.
- Built a live gameshow platform for 20K+ concurrent players and payroll and time-and-attendance software for 10K+ clients.
- Led React Native mobile. Mentored 4 to 5 PMs and developers; cut production defects 25% and raised sprint velocity 30% over 12 months.
- Designed the organization's AI delivery pipeline: issue, agent branch, CI, preview deploy, human approval, production.

Civic AI company (client confidential)

Aug 2026 to present

Lead Engineer, working alongside the founder

- Lead engineer and top contributor on a platform that prepares agendas, staff reports and council packets for cities, counties and boards, where every AI claim traces to a page of a real document.
- Fixed ingestion and retrieval across hybrid search (BM25 and vector search fused with Reciprocal Rank Fusion, reranked to the top five), where every result carries a citation chain, a High/Medium/Low confidence and a verification pass.
- Audited the infrastructure and rebuilt it in a new AWS account with Terraform and gated deploys; built the staff admin portal on its own trust boundary with an audited view-as.
- Shipped a pilot customer's full punch list to production (18 Tier 1 and 11 Tier 2 items): 500+ commits and 1,401 backend tests at handoff. Ships an MCP server and a CLI.

Founder

- Built and ran a real-time penny auction platform with 25K+ registered users.

SELECTED PROJECTS

- **Camera-based vital-signs SDK** (client confidential). Heart rate, breathing and stress from a 30-second face scan. Native Swift, Kotlin and React Native capture feeding an edge signal-processing engine (about 0.7 ms of CPU per scan); each scan is reduced to three averaged color values per frame, and no image ever leaves the phone. 335 tests in three languages; 19 golden traces gate CI.
- **Command for Philips Hue**. A paid App Store app from one Swift codebase across iPhone, iPad, Mac, Apple TV, Vision Pro, Apple Watch and widgets (about 44K lines, 450+ commits). On-device Foundation Models scene generation and music-reactive lighting streamed over DTLS at about 25 frames a second.
- **In The Book Club**. Social reading app for iPhone, web and an edge API, entirely on Cloudflare (Workers, D1, R2): 727 commits in 30 days, about 86K lines of TypeScript, 1,335 tests, encrypted direct messages with audited moderator access.
- **VenableDove Games**. One-person iOS studio: five titles on the App Store within 23 days of opening, built on deterministic, fully tested Swift engines with a fixed 60 Hz timestep and serverless input-replay multiplayer.

SKILLS

Languages	TypeScript, JavaScript, Swift, Kotlin, PHP, SQL
Backend and data	Node, Postgres (RLS, role-per-tenant), MySQL, MongoDB, double-entry ledgers, idempotent payment flows, Stripe Connect, queues
Cloud	AWS (CDK, Lambda, ECS Fargate, SQS), Cloudflare (Workers, D1, R2, Durable Objects, Queues, Workflows), Terraform, GitHub Actions with OIDC, NGINX, Azure
Mobile	Swift 6, SwiftUI, SpriteKit, StoreKit 2, WidgetKit, visionOS, tvOS; React Native and Expo (EAS, OTA); Kotlin and Jetpack Compose; Fastlane
Applied AI	Retrieval with citations and confidence, structured tool use, evaluation, MCP servers, on-device and local models, agent orchestration with human approval gates
Delivery	Specs and ADRs, runbooks, incident reports with before-and-after numbers, test-driven development, mentoring

EDUCATION

Louisiana Delta Community College
AAS, Business and Information Technology

University of Louisiana at Monroe
Two semesters of Computer Science