

Manuel Parra

Technical Lead (IC) | Backend, Document and Financial Systems

Phone: +58 424 434 8349 | Email: contact@th3nolo.com

Work: Remote / UTC-4 / English and Spanish / Open to relocating for the right role

LinkedIn: [linkedin.com/in/th3nolo](https://www.linkedin.com/in/th3nolo) | Website: th3nolo.com | GitHub: github.com/th3nolo

PROFESSIONAL SUMMARY

Hands-on technical lead with more than six years of software engineering experience. Led teams of two to three engineers while owning architecture and implementation for construction reporting, contractor risk, and financial automation. Translated client needs into system boundaries, requirements, and shipped workflows.

WORK EXPERIENCE

Technical Lead (IC)

ConTrust Suite - Construction Daily Reporting Platform · Client: Modern Building Leaders (MBL) | March 2026 - Present

- Led two to three frontend, backend, and AI engineers, including junior AI engineers, and designed a multi-repository, tenant-aware construction reporting platform spanning FastAPI services, React/Vite workflows, PDF workers, shared schemas, dashboard analytics, and AI-assisted reporting.
- Built ingestion and mapping flows that convert daily-report PDFs and SharePoint files into normalized reporting data. Records keep raw values, validation flags, source references, and document evidence.
- Improved extraction reliability with source-evidence contracts, idempotent workers, real-document regression tests, accuracy benchmarks, and retry and concurrency controls.
- Delivered seven workflows for source-file review, report navigation, dashboard metrics, canonical review, manpower and equipment analytics, and grounded daily briefs and questions.

Technical Lead (IC)

ConTrust · Client: Kai Arabia | Remote | January 2026 - March 2026

- Led a three-engineer build, with frontend, backend, and junior AI engineers, of a contractor prequalification, Know Your Business (KYB) verification, and financial-risk platform for Saudi construction. Translated client and product discussions into five architecture documents and more than 44 requirements covering domain rules, system boundaries, and delivery priorities.
- Improved an internal audited-statement extraction evaluation from 34% to 94%. One 22-page filing processed in 97 seconds at roughly USD 0.30 to USD 0.42.
- Designed PostgreSQL and FastAPI domain layers for onboarding, KYB and UBO verification, financial facts, risk scores, payments, audit logs, and notifications.

Systems Architect, Rust Cryptography & Consent Infrastructure (IC)

LayerD · Client: MEMob | Remote | October 2025 - December 2025

- Built the Rust cryptographic core for identity-based encryption, BLS signatures, Merkle proofs, threshold decryption, PVSS and DKG flows, and WASM and FFI exports.
- Secured gateway flows for consent ingestion, Merkle batching, HCS anchoring, proof indexing, provider isolation, OIDC and JWKS tokens, API-key rotation, and restart-safe proof recovery.

Backend Engineer & Systems Architect (IC)

Stackit.ai | Remote | March 2024 - October 2025

- Led a team of two to three backend and frontend engineers and owned backend and platform architecture for StackIT's onchain wealth automation product. Connected smart wallets, Aave V3 health-factor protection, Bridge.xyz and Plaid onboarding, Privy authentication, scheduled workers, admin operations, and frontend execution flows.
- Connected Plaid OAuth and Bridge.xyz for Know Your Customer (KYC) and KYB onboarding, bank linking, virtual accounts, transfers, static memos, webhooks, idempotency, and compliance-state synchronization.
- Automated Aave V3 health-factor protection for 84 smart-wallet positions. The system supported more than \$2M in collateral flow with zero liquidations over 18 months.

Backend Engineer, Real-Time Sports Gaming Platforms (IC)

Zingiber | Remote | September 2020 - March 2024

- Built backend systems for real-time fantasy sports and gaming products and directed one developer's backend work. Owned API design, MongoDB schemas, WebSocket state flows, sports-data integrations, debugging, and documentation.

SKILLS

Core engineering: Python, TypeScript, Rust, SQL, FastAPI, PostgreSQL

Architecture: Service boundaries, multi-tenant systems, REST APIs, message queues, background jobs

Delivery: CI/CD, audit logging, observability, source-evidence contracts, regression tests

Domains: Document AI, financial automation, payments, cryptography

EDUCATION

Bachelor's Degree in Computer Science

Universidad de Carabobo | 2015 - 2021

LANGUAGES

Spanish - Native | English - C1