Cristhian J. Alvarez

Senior Full-Stack / AI Engineer

TypeScript · React · Node.js · Claude / Anthropic SDK · PostgreSQL · AWS · Docker

Honduras (Remote, UTC-6) | contact@cjalvarez.com | +504 9767-4646

cjalvarez.com | github.com/CJAlvarez | linkedin.com/in/cj2alvarez

SUMMARY

Full-stack engineer building software since 2018, including remote work for U.S. companies. Shipped a **Claude-based financial AI agent** (Anthropic SDK, TypeScript) to production for a U.S. fintech: it answers questions grounded in clients' bank-connected data and takes permission-checked actions through Zod-validated tool calls, with explicit user confirmation for sensitive or bulk changes. Works with AI-assisted development (Claude Code, OpenAI Codex, GitHub Copilot), backed by tests and code review. Former **CTO** of a healthcare records platform (2021 – 2022), now a part-time technical advisor. Experienced with automated testing, Docker, AWS, and CI/CD.

SKILLS

AI: LLM applications (Claude, Anthropic SDK), AI agents, tool calling, structured outputs (Zod), MCP client, tool-grounded answers, human-in-the-loop approvals, custom chat response blocks
Programming Languages: TypeScript, JavaScript, Python (automation routines), SQL
Frontend: React, Next.js, Vue.js, Angular, Ionic, React Native, Electron
Backend & APIs: Node.js, NestJS, REST APIs, GraphQL, Zod, SOAP, BullMQ, QuickBooks API
Databases: PostgreSQL, MySQL, MongoDB, Redis
Cloud & DevOps: AWS (EC2, RDS, S3), Docker, CI/CD (GitHub Actions, GitLab), Cloudflare, Linux
Security & Testing: RBAC, Row-Level Security (RLS), Jest, Vitest, Playwright
AI Dev Tools: Claude Code, OpenAI Codex, GitHub Copilot
Tools: Jira, ClickUp, Slack, GitHub, Bitbucket

EXPERIENCE

Full-Stack Developer – BestRoofingSupply 2026

U.S. roofing supply client · Remote · Vue.js, NestJS, TypeScript, MySQL, Redis, Docker

- Built the administrative platform end to end, from database to deployment.
- Implemented role-based access control (RBAC) with roles and permission guards.
- Integrated QuickBooks product synchronization through BullMQ background jobs on Redis.
- Built a promotions module that limits eligible product types, quantities, and discounts.
- Set up CI/CD with GitHub Actions for frontend and backend deployments (Sequelize migrations on each deploy) and wrote automated tests.

Full-Stack & AI Developer – Cash Bakery 2024 - 2026

U.S. cash-flow fintech · Remote · Next.js, React, TypeScript, Node.js, PostgreSQL, Anthropic SDK, MCP, Docker

- Built a **Claude-based financial agent** (Anthropic SDK, TypeScript) that answers clients' questions and generates analyses from bank-connected accounts and transactions, grounded in database queries instead of model memory.
- Implemented **tool calling** so users could change data from chat, such as categorizing transactions and marking them as recurring, with explicit confirmation for sensitive or bulk actions; wrote automated tests for the agent's tools.
- Validated tool-call arguments and the model's JSON outputs with **Zod** schemas before acting on them, and used Zod for API payloads.
- Ran agent actions under the platform's **RBAC and Row-Level Security**, so each client reached only its own data and users acted within their permissions.
- Designed a markdown response format with custom blocks (charts, tables, segments) that the React chat renders in the conversation.
- Connected the agent to external **MCP** servers as an MCP client and built Claude agent skills.
- Built interactive features and redesigned the platform's UI/UX; used Docker and managed deployment environments.

Full-Stack Developer (Part-Time Contract) – CyB Innovations 2025

U.S. client · Remote · Next.js, GraphQL, TypeScript, Docker

- Built a business management system with Next.js, TypeScript, and GraphQL.
- Implemented appointment scheduling, class management, and SMS automations, with automated tests.

Tech Lead – RUDIHN 2023 – 2024

Government consulting contract · Remote, with on-site meetings with government agencies · Angular, Node.js, PostgreSQL, AWS

- Built a centralized national producer registry platform for government agencies.
- Started as QA and was promoted to Developer and then Tech Lead within 2023, leading a 4-person team.

Technical Advisor (part-time) – UNIMED 2023 – Present

Healthcare platform · Part-time · Angular, Node.js, TypeScript, MySQL, AWS

- Part-time oversight of the platform: follow-up calls and server monitoring.

CTO – UNIMED 2021 – 2022

Healthcare platform · Hands-on · Angular, Node.js, TypeScript, MySQL, AWS

- Designed and built a digital medical records platform for clinics, serving patients, doctors, administrators, institutions, and insurers.
- Led a small development team (1–2 developers) and set technical direction (2021 – 2022).
- Deployed the platform on AWS (EC2, RDS, S3), using Docker for development and isolated testing.
- Built statistics modules for data visualization and process tracking.
- Automated server-side and database processes, and wrote automated tests.
- Packaged the application for web, Android, iOS, and desktop (Electron).

Developer – Impact Mobile 2019 – 2021

SMS and messaging solutions for large enterprises · On-site, Honduras · Angular, Node.js, Python, MySQL, AWS

- Developed web and hybrid applications for enterprise SMS services, company admin panels, and WhatsApp conversation-management and bot systems.
- Designed database architectures.
- Integrated SOAP and REST services and deployed applications on AWS.
- Built portable microservice servers that could be moved between environments with little effort.
- Wrote modular technical documentation and corporate reports.

Freelance Developer – Farmacia Bethel, RoosterHN / OrixHN, MarsoHN, El Mercado HN, Selaski 2018 – 2021

Independent projects for local businesses · Honduras

- Designed and built the Farmacia Bethel management system: users, products, inventory, customers, loyalty points, and statistics modules, with server and database automation and SMTP email services.
- Built and launched the RoosterHN and OrixHN websites: landing page, inventory and product detail pages, contact section, SEO, data server, and SMTP email services.
- Built and launched the MarsoHN admin system for users, portfolios, and loans, with server and database automation, security controls, SMTP services, peripheral integration, Docker, and automated tests.
- Built El Mercado HN end to end (full-stack) from a client-provided design (2020), and improved and optimized data tables and actions for Selaski through Freelancer.com (2021).

EDUCATION

Systems Engineering (Ingeniería en Sistemas) – UNITEC, Honduras 2016 – 2021 · Awarded 2022

LANGUAGES

Spanish (native) | English (B2 Upper Intermediate, EF SET 2026: cert.efset.org/en/13iJMh)

References available upon request.