José M. Vasquez

Senior Full Stack Developer | Payments, Compliance and Platform Engineering

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SUMMARY

Senior Full Stack Developer with 7 years of experience, currently building regulated fintech and compliance systems: payment orchestration, an in-house payment gateway, provider integrations and AML/KYC automation. I work across two backend stacks, TypeScript/NestJS and Python/FastAPI, with Next.js/React on the front, over PostgreSQL, Redis and job queues. I care about correctness where money moves (idempotency, locking, audit trails, signed webhooks) and about the process around the code: decision records, documentation standards and CI gates that keep a team from breaking things.

EXPERIENCE

Senior Full Stack Developer | UPCARD | Remote | Nov 2025 – Present

Colombian white-label fintech: prepaid e-money wallets in COP and USD, Visa prepaid cards, payroll disbursement and earned-wage access for companies and partner brands.

Payment orchestrator for an institutional client

- Platform borrowers use to repay their loans online via PSE and Bre-B, covering hundreds of thousands of active obligations. It replaced the previous provider in a fixed-date, no-rollback cutover.
- Built the NestJS orchestrator: payment-start use case, payer-return resolution with five precedence rules, webhook reconciliation with signature and freshness checks (constant-time comparison), and client notification.
- Added Redis-backed anti-abuse with sliding windows, lockout and captcha that fails open, so a Redis outage never blocks a payment. Also added PII guards and a read-only operations console with CSV/XLSX export that contains no personal data.
- Built the Next.js payment site, certified item by item against the payment processor's checklist.

In-house payment gateway (PSP)

- Company-owned gateway for collecting via PSE and Bre-B without third parties, designed to never charge twice, always notify and expose explicit payment states.
- Built the core domain in a pnpm/Turborepo monorepo: payment-intent creation, idempotent checkout sessions, a single-payment lock per obligation, an append-only audit trail, field-level encryption, persisted timers with leases, UUIDv7 keys and a clock-drift guard that refuses to create payments when server time cannot be trusted.
- Built the HTTP client for the PSE connector and a timezone-safe dates package.

Provider gateway

- Service between UPCARD and its card, KYC and payments providers. It is the only place their credentials live (AES-256-GCM), and it verifies webhook signatures (HMAC, JWT), issues per-client API keys and enforces idempotency keys on Valkey.

White-label platform (3 brands in production)

- Designed an async export engine for financial data with a registry pattern, BullMQ jobs, multipart streaming to object storage and keyset pagination. Migrated 10 business domains onto it and cut cursor page time from 33.66 ms to 0.42 ms over 300k rows.
- Designed a 3-layer design-token architecture with Zod-validated brand configs, so changing a brand's primary color is now a ~11-line diff.
- Built a GitLab CI merge-request gate that scopes lint, typecheck, tests and build to the MR diff, made blocking in two repositories (cache save from 1:36 to 0:03).
- Cut test-suite time 30% (255 s to 178 s) with all 4,238 tests green by moving 237 pure-logic specs out of jsdom.
- Established the documentation standard (RFC, ADR, backend reality, atomic implementation steps), applied to 63 features and adopted by 5 developers.

Infrastructure

- Run the self-hosted GitLab (upgrades, daily backups, rollback runbooks) and the company VPN, with DevOps access across production on DigitalOcean.

Senior Full Stack Developer | MincaAI | Remote | Jun 2026 – Oct 2026

Polyglot microservices monorepo (Python services, React frontend) that turns broker documents into standardized insurance quotes using LLM extraction.

- Owned end to end the AML/KYC module required by Article 492 of Mexico's Insurance and Surety Institutions Law (LISF), from domain design to production UI.
- Built an automated KYC engine that ingests a policy request's attachments, classifies them, extracts their fields, runs checks and cross-validations, and stores a verdict with per-check reasons. It covers individuals and companies, new and existing clients, and risk tiers.
- Founded the module's framework-free domain package (hexagonal architecture, typed ports with Python Protocols), enforced by blocking import-linter contracts in CI. A second engineer later built on it.
- Delivered the FastAPI backend (SQLAlchemy 2 repositories, Alembic migrations) and the React case inbox and 4-step validation wizard, often shipping backend and frontend of the same feature on the same day.
- Led the implementation of a repository layer that moved data access out of HTTP routes in a live service, delivered in 15+ incremental slices over 3 days behind characterization tests and an import-linter gate.
- Traced a recurring cross-module data leak to an untyped nullable column acting as a discriminator. Showed why the tests missed it (they grepped compiled SQL instead of executing it) and wrote the taxonomy contract that fixed it.
- Delivered 224 code commits (+40.8k lines of Python) in the first 8 weeks, about 30% of them tests or refactors.

Senior Software Engineer (Front-End) | Inlaze | Remote | Mar 2025 – Mar 2026

- Led a 4–5 engineer cell for about 5 months, then backed up the new cell lead.
- Planned the initial full-stack architecture (infrastructure, frontend, backend) of a new product, bridging design mockups and implementation, and led its frontend execution.
- Engineered a Claude Code + CLI workflow integrated with Jira that validates documentation requirements in the repository and closes tickets automatically. Also designed request templates that give full technical context from day zero.

Stack: Next.js, TypeScript, NestJS, Tailwind CSS, Shadcn, TanStack Query, AWS, Docker.

Frontend Developer (concurrent contract) | Trades.org | Remote | Feb 2023 – Feb 2025

- Architected an atomic-design component library (about 10 atoms, 7 molecules, 5 organisms and 5 templates) with Tailwind CSS and Shadcn, shared by 2 web applications and a React Native app.
- Implemented SSR/SSG, code splitting and asset optimization in Next.js, working asynchronously with a team distributed across 6 countries.

Front End Supervisor | Centria Group | Remote | Feb 2021 – Feb 2025

- Led a frontend team that grew from 3 to 5–6 engineers, providing mentorship, technical direction and hiring input.
- Designed and implemented the company's first CI/CD pipeline, replacing manual, unverified production deployments with automated build, test and deploy.
- Migrated a production application from React to Next.js and set up Apollo Client for GraphQL microservices (queries, mutations, subscriptions) across projects.

Team Lead | SEO Contenidos | Venezuela | Aug 2019 – Sep 2021

- Led a 3-person team delivering 4 SEO-optimized WordPress sites, with load times of about 1 second on heavy pages.

TECHNICAL SKILLS

Backend: TypeScript, NestJS, Node.js, Python, FastAPI, Pydantic, REST, gRPC, OpenAPI contract testing

Frontend: Next.js (App Router, RSC), React, Tailwind CSS, Shadcn, TanStack Query, Zod, i18n at scale, design tokens, accessibility

Data and messaging: PostgreSQL, Drizzle ORM, SQLAlchemy 2, Alembic, Redis / Valkey, BullMQ, keyset pagination, row-level and distributed locking

Payments and compliance: PSE, Bre-B, idempotency keys, webhook signature verification, reconciliation, audit trails, field encryption, AML/KYC, white-label multi-tenancy

Architecture: Hexagonal architecture, ports and adapters, import-linter boundaries, ADRs and RFCs, characterization testing

Testing: Vitest, Jest, pytest, Playwright

DevOps: GitLab CI, GitHub Actions, Docker (multi-stage), self-hosted GitLab, DigitalOcean, Coolify, AWS (consumer)

AI-assisted development: Claude Code workflows, LLM document extraction in production (AWS Bedrock)

EDUCATION AND LANGUAGES

Computer Engineering studies, Universidad Nacional Experimental del Táchira (UNET)
Platzi certifications: Next.js, React
Spanish (native) | English (B2, upper intermediate)