

JESÚS EMILIO RÁBAGO LEÓN

Platform Engineer & Full Stack Developer

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PROFESSIONAL SUMMARY

Platform Engineer and Full Stack Developer with 6+ years designing, migrating and operating business-critical infrastructure in enterprise environments. Specialized in virtualization (Proxmox), containerization (Docker), enterprise networking and self-hosted AI infrastructure on dedicated GPUs. Led a 5-person technical team running production services for 300+ concurrent users, including critical ERPs, web platforms and internal APIs. I combine deep Linux infrastructure experience with modern Full Stack development in Next.js, Laravel and Node.js, which lets me design end-to-end solutions optimized for cost, performance and security.

PROFESSIONAL EXPERIENCE

Sani Capital

Platform Engineer & Full Stack Developer

Mexicali, BC, Mexico

May 2023 – April 2026

Technical lead of the platform area, responsible for critical infrastructure, Full Stack development and IT operations for a company with ~300 users. Team of 5 (IT support + DevOps).

Infrastructure & Platform

- Led the full migration of cloud infrastructure to a dedicated on-premise server managed with Proxmox VE (5 VMs, 1 LXC, multiple Docker containers), reducing reliance on external services and optimizing operating costs.
- Designed, physically assembled and configured an AI server with 6x RTX 3090 GPUs for self-hosted LLM inference (Ollama, LLaMA) and multimedia generation (ComfyUI), enabling processing of sensitive data without exposing it to third-party providers.
- Implemented business process automation with n8n + Ollama, including automatic lead classification, removing manual work from the sales team.
- Migrated a Frappe ERPNext v10 instance from failing bare-metal hardware to a virtualized Proxmox environment, improving availability for ~200 concurrent production users.
- Implemented business continuity with scheduled automated backups in Proxmox and RAID10 storage redundancy.

Networking & Security

- Designed and operated an enterprise network for ~300 concurrent users with traffic peaks of 1.5 Gbps, using a 1 Gbps dedicated link plus a multi-WAN balancer with 5 ISPs in failover to guarantee continuity.
- Deployed corporate VPN with WireGuard and VLAN network segmentation to isolate critical access (ERP, AI and accounting servers).
- Built out physical network infrastructure with Ubiquiti switches, structured cabling and Grandstream IP telephony.

Full Stack Development

- Built from scratch a web platform for medical office booking and management with Next.js 14 (App Router), Prisma ORM, Zustand and MySQL, shipping the MVP to production.
- Optimized critical features in a Laravel platform through query refactoring and strategic caching, cutting response times by 50%.
- Migrated legacy Vue 2 components to Alpine.js in high-traffic sections, improving performance and reducing bundle size.
- Dockerized existing Node.js and Laravel applications, standardizing deployments and reducing onboarding time for new services.
- Administered a self-hosted GitLab instance with CI/CD for the development team.

Leadership & Operations

- Led a technical team of 5 (IT support + DevOps/SysAdmin) with consistent, documented weekly deliveries under agile methodologies.
- Operated business-critical production services: AI server, accounting ERP, ERPNext, dedicated OVH server (Canada), GitLab, corporate mail server and internal applications.

Freelance

Full Stack Developer & Technical Lead

Remote • Mexicali, BC

March 2018 – April 2023

- Led a distributed team of 10 developers building and operating a FiveM multiplayer server, sustaining 300 daily concurrent users.
- Designed the project's full stack architecture: backend (Node.js, Lua), frontend and end-to-end administration of dedicated OVH servers on Linux.
- Developed and adapted complex mods on the VRP, VRP2, ESX and QBCore frameworks, including changes at the game's business-logic level.
- Implemented mitigation for recurring DDoS attacks on internet-facing infrastructure, keeping the service available.
- Balanced freelance projects with a Computer Systems Engineering degree (UTEL) during 2021–2023.

SELECTED PROJECTS

Personal homelab — Self-hosted infrastructure cluster

Continuous operation of 3 Proxmox VE servers with segregated workloads: a personal production node (LXC running Docker for my own apps + OPNsense in a VM as firewall/router), a GPU virtualization node with vGPU on an NVIDIA RTX 2060 Super (Windows VMs with graphics acceleration), and an isolated testing node (RAID 0 across 4 HDDs). Services exposed securely through Cloudflare Tunnels (zero-trust, no open ports). Additional stack: Pi-hole, Plex and game servers.

Esclusa — Per-process network isolation with automatic failover *(personal project)*

Designed and built a system that binds up to 32 instances of the same application to independent network egresses (SOCKS5 proxies or the local ISP) through kernel-level per-PID routing, without injecting code into the application. Includes automatic failover with return once the egress recovers, IP

leak blocking (strict mode + QUIC), detection of frozen instances by comparing frames captured from the Windows compositor, and a web dashboard with proxy health and 24 h latency. The machine self-deploys from a git branch with pre-flight verification and automatic rollback on failure. ~3,000 lines of PowerShell 5.1 with embedded C# via P/Invoke for native Windows API calls.

Trading AI — Quantitative paper-trading system with a custom backtest engine *(personal project)*

Autonomous system running 24/7 across 18 Binance pairs on 15-minute candles, executing five mean-reversion strategies in parallel with independent virtual portfolios. Event-driven Node.js backend with no frameworks: WebSockets for ticks and candle closes, limit orders with a maker/taker execution model, slippage on stops and order expiry. Custom lookahead-free backtest engine, calibrated against walk-forward, used to evaluate 80+ strategy families and 240 variants over 3.2M candles; that round included the earlier LLM-based version (local Ollama + API), which I dropped after measuring that it did not beat a three-condition deterministic rule. Validated on 12 months in-sample and 111 days out-of-sample never seen by any optimization process: the winning strategy closed there with a 76% hit rate, 2.49 profit factor and 2.6% maximum drawdown. Risk management with ATR-based stops, time-stops, per-pair escalating cooldowns and directional exposure limits. Per-strategy JSON persistence with capital integrity validation at startup, hourly backups and recovery after restart. Vanilla JS and SVG dashboard with real-time state over Server-Sent Events. Deployed in a Docker container on a Raspberry Pi in the personal homelab.

Medical office booking platform *(Sani Capital)*

Built the application end-to-end: backend with Next.js 14 (App Router) and Prisma over MySQL, state management with Zustand and authentication. Shipped to production and currently in operation.

Self-hosted AI infrastructure *(Sani Capital)*

Designed and physically assembled a server with 6× NVIDIA RTX 3090, configured the inference stack with Ollama + LLaMA, integrated ComfyUI for multimedia generation, and built internal APIs for secure consumption by company applications. Lead classification automated with n8n + a local LLM.

FiveM multiplayer server

Led development and operation of a game server with ~300 daily concurrent users on dedicated OVH infrastructure. Node.js + Lua backend, mods on the VRP/ESX/QBCore frameworks, DDoS mitigation and end-to-end Linux administration.

TECHNICAL STACK

Infrastructure & Virtualization: Proxmox VE · Docker · Docker Compose · LXC · KVM · Linux (Ubuntu/Debian) · Bash scripting · RAID · Automated backups · vGPU (NVIDIA) · Raspberry Pi

Cloud & Hosting: OVHcloud · Cloudflare · Cloudflare Tunnel · Dedicated servers · On-premise · Self-hosted infrastructure

Networking & Security: WireGuard · OPNsense · VLANs · Network segmentation · Multi-WAN failover · SOCKS5 proxies · QUIC · Reverse proxy · SSL/TLS · Firewall · DDoS mitigation · bcrypt · HMAC sessions · Ubiquiti UniFi · Grandstream

DevOps & Automation: CI/CD · Self-hosted GitLab · Git (worktrees, multi-branch) · n8n · node-cron · Monitoring · Automated deployments · Load balancing · Monorepos (pnpm workspaces)

AI Infrastructure: Ollama · LLaMA · DeepSeek · ComfyUI · Self-hosted LLMs · CUDA · Multi-GPU (NVIDIA RTX 3090) · Internal AI APIs · Claude API (tool use) · Anthropic SDK

Backend: Node.js · TypeScript · Fastify · Express · Koa.js · Laravel (PHP) · PowerShell · C# (P/Invoke) · REST APIs · WebSockets · Server-Sent Events · Event-driven architecture · JWT · Prisma ORM · Drizzle ORM · Eloquent ORM · Lua

Frontend: Next.js 14 (App Router) · SvelteKit 2 (Svelte 5 runes) · React · Zustand · Redux · Vue.js · Alpine.js · Vanilla JS · JavaScript (ES6+)

Databases & Caching: PostgreSQL · MySQL · MariaDB · Oracle · Redis · SQLite

Integrations & APIs: Anthropic Claude · Binance API (REST + WebSocket) · whatsapp-web.js · Puppeteer

ERP & Business Tools: Frappe ERPNext · GitLab · Postman · Insomnia

Methodologies: Agile · Scrum · Multi-tenant architecture · Code review · Technical documentation

EDUCATION

UTEL — Universidad Tecnológica Latinoamericana en Línea 2021 – 2024

B.Eng. in Computer Systems Engineering · GPA: 9.9/10 (≈ 3.96/4.0)

Relevant coursework: Cloud Infrastructure · Web Development

CECYTE Plantel Xochimilco — Mexicali, BC 2010 – 2013

Technical Degree, Software Programming

Universidad Autónoma de Baja California (UABC) 2013 – 2015

Computer Engineering · Partial coursework (degree not completed)

CERTIFICATIONS

Advanced Statistics for Data Science Specialization Jun 2022

Johns Hopkins University (Coursera)