

ISMAEL OMAR LEONIDAS HURTADO VARGAS

Senior Full Stack Engineer · Artificial Intelligence / LLM

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PROFILE

Senior Full Stack Engineer with 10+ years building end-to-end solutions with React, Node.js, TypeScript and microservices architectures (NestJS). Specialized in AI-powered applications (self-hosted LLMs, chatbots, RAG, OCR), payment (Niubiz) and SAP integrations, and data analysis. I apply SOLID principles, clean architecture (Hexagonal, DDD) and cloud deployment (AWS, Docker, CI/CD). Statistics background (Statistical Engineer) and an ongoing M.Sc. in AI.

PROFESSIONAL EXPERIENCE

SICRED — Mexico

Remote

Full-Stack Developer · Freelance

May 2025 – July 2026

- Developed a microservices platform (NestJS + Fastify + Prisma) for credit-agent management and operations, under a Hexagonal + DDD + Clean architecture.
- Built the mobile app (React Native + Expo, TypeScript) and the web frontend (React + RSuite + Tailwind) that consume the microservices.
- Built a legal-document comparison platform with an in-house OCR microservice in Python (FastAPI + PyMuPDF + Tesseract) that digitizes scanned PDFs, and a self-hosted AI engine (Ollama) that contrasts documents and summarizes case files in a chat.
- Automated CI/CD with GitHub Actions (QA and production environments): image build and push with Docker Buildx, semantic versioning and secret scanning (gitLeaks), with container orchestration in Docker Compose.
- Hardened security with Cloudflare (WAF, rate limiting and Turnstile anti-bot) and protected the APIs at application level with rate limiting (Fastify) and security headers (Helmet).

Exandal Holding Group

Lima, Peru — Agro-industry

Full-Stack Developer · Self-employed

July 2025 – June 2026

- Maintained and extended the agro-industrial quality management and analysis system (lab tests, per-lot traceability) in Node.js.
- Extended the system integrations: SAP (HANA via the hdb driver), scale devices over SerialPort and Excel/PDF reporting.
- Developed the Tickets module (internal help desk on SAP HANA): assignment, in-progress, review and closing workflow with priorities, attachments, notes with read receipts, email notifications, a Gantt planner and a reports/KPIs dashboard.
- Built ExcoBot, an OpenAI chatbot (function calling) that delivers SAP order traceability in natural language, with KPI charts.
- Designed a RAG chatbot with hybrid retrieval to trace quality and food-safety results.

BizPeru

Remote, Peru — ISP / WiFi

Full-Stack Developer · Freelance

January 2025 – December 2025

- Built a WhatsApp chatbot (whatsapp-web.js + OpenAI) with multi-session management and real-time communication (SocketCluster) for customer support.
- Integrated the Niubiz payment gateway into the online store (checkout with card tokenization and charge capture), with a NestJS + Fastify + Prisma backend and a Next.js 16 + Tailwind frontend.
- Automated the ISP network: provisioned WiFi hotspots on MikroTik (RouterOS API) and integrated SmartOLT (fiber optics), with PDF invoicing and vouchers.
- Configured CI/CD with GitHub Actions (image build and push with Docker Buildx and semantic versioning) and orchestrated the services with Docker Compose.
- Protected the APIs with Cloudflare (WAF, rate limiting and Turnstile anti-bot) and hardened the application with rate limiting (Express/Fastify) and security headers (Helmet).

Municipalidad Metropolitana de Lima

Lima — SIAM System

Senior Programmer Analyst · Hybrid

June 2023 – March 2026

- Was part of the team that developed SIAM, a Node.js/TypeScript microservices ecosystem with Docker, per-module CI/CD (GitHub Actions) and a Hexagonal + DDD architecture.
- Developed modules of the Electronic Enforcement System (photo and video tickets): REST APIs, a geospatial viewer (deck.gl/Leaflet) and video streaming for evidence.
- Developed the Business Operating Licenses module of SIAM (NestJS, Hexagonal + DDD): business activities with zoning restrictions, risk classification and ITSE (safety inspection), advertising permits, and the application workflow through to license issuance with a digitally signed resolution.
- Integrated Firma Perú (PCM) for the digital signing of resolutions and tickets, meeting document traceability and security standards.
- Built LimaBot, a citizen-support chatbot with OpenAI/GPT that resolves queries about procedures, services and TUPA.
- Integrated the government PIDE interoperability services (RENIEC, SAT and Immigration) for secure data exchange across public agencies.

ATU — Urban Transport Authority

Programmer Analyst · Hybrid

Lima & Callao, Peru
December 2020 – January 2023

- Implemented the tickets module of the Activity Registry System (SRA) via REST APIs (Node.js/Express, SOLID), improving the efficiency of infraction management.
- Developed the TUPA module of the Payment Gateway (pasarela.atu.gob.pe) with secure transactions (JWT) and the Niubiz provider integration, streamlining online payments.
- Created the authorized-personnel and visitor access modules (symptomatology record) and the payments and debt inquiry module (SISATU), strengthening access control and access to financial information.
- Designed the warehouse and work-order management module (Operational Management System) and carried out improvements and maintenance of the recruitment system (SISCON).

Cobra Perú

Systems Analyst — Head Office · On-site

Lima — Telecommunications (client: Telefónica del Perú)
November 2018 – January 2021

- Led the selection and training of the web development team (JS/Node.js) and implemented the GIA integrated administration management system (Andean Zone); administered databases (SQL Server 2016, MongoDB) and BI dashboards (Qlik Sense, Power BI) for senior management.

Programmer Analyst — Telecommunications

July 2016 – October 2018

- Developed modules and production/quality reports (JS/Node.js) and automated the delivery of indicators by email (C# + SQL Server 2016).

Database Developer / Programmer Analyst

October 2015 – June 2016

- Built stored procedures for indicators (SQL Server 2008 R2) and automated database backup generation.

Statistical Analyst

December 2014 – September 2015

- Analyzed production and quality indicators for the client Telefónica del Perú and built dashboards and KPIs (Power BI) for decision-making.

EDUCATION

M.Sc. in Artificial Intelligence — Universidad César Vallejo (UCV)

Student · since 2026

M.Sc. in Systems & Computer Engineering, Software Engineering specialization — U. N. Mayor de San Marcos

Graduate · 2020–2023

Statistical Engineering, Bachelor (Top Decile) — Universidad Nacional de Trujillo

2009–2013

Computer Science & IT — Cibertec

2020–2025

TECHNICAL SKILLS

Languages: JavaScript, TypeScript, Node.js, Python, C#, SQL, PHP (basic).

Frontend / Mobile: React, RSuite, Tailwind CSS, Next.js, React Native + Expo.

Backend: NestJS, Fastify, Express.js, microservices, REST API, JWT; Laravel (basic).

Artificial Intelligence: OpenAI/GPT, Ollama (self-hosted), Langchain, agents, chatbots, RAG, OCR.

Data & BI: Power BI, Qlik Sense, dashboards, KPIs, statistical analysis.

Databases: PostgreSQL, SQL Server, MySQL, MariaDB, MongoDB, Prisma.

DevOps / Cloud: Docker, GitHub Actions (CI/CD), Cloudflare (WAF, Turnstile), AWS (EC2, S3, IAM), Vercel, Linux, PM2.

Architecture & integrations: SOLID, Clean Code, Hexagonal, DDD, Scrum; SAP, Niubiz, Firma Perú, PIDE.

CERTIFICATIONS & LANGUAGES

Certifications: n8n + MCP: automation and AI agents (Dev-Talles, 2025) · Chatbots with OpenAI (Platzi, 2024) · SOLID & Clean Code (Udemy, 2024) · React, TypeScript & Docker (2023).

Languages: Spanish (native) · English (intermediate).