

JUAN CAMILO LOZADA GARAVITO

FULL STACK DEVELOPER | AI



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juancamilogaravito

Full Stack Developer with 2+ years of experience, specialising in Angular and React on the frontend, and Spring Boot, Node.js and Laravel on the backend. Design and development of APIs, database modelling and management, and deployment with Docker on Linux. I work with TDD, Scrum and Git Flow, bringing in AI and agents to boost productivity.

TECH STACK

- Frontend: Angular, React, React Native, TypeScript
- Backend: Java (Spring Boot), Node.js, PHP (Laravel), Python, REST APIs, RabbitMQ (async messaging)
- Databases: PostgreSQL, MySQL, Supabase
- AI / Agents: LangGraph, MCP, RAG, tool design, LLM integration
- IoT / Firmware: embedded microcontrollers, C
- DevOps: Docker, Linux
- Method & architecture: TDD, modular monolith, hexagonal architecture, Scrum, Git Flow, SOLID principles

EXPERIENCE

Full Stack Developer

Tesla Ingeniería y Comunicaciones S.A. · Energy sector · Mar 2025 - Present

- THOT: internal multitenant tool for reporting electricity consumption to customers and regulators such as XM, built end to end (frontend, backend, database, tests and deployment) with Laravel, Angular, Python, Redis and MySQL. I automated report generation and designed the analytics module: a statistical baseline per metering point over its historical series and threshold-based deviation detection, raising alerts for mismatches and potential grid vulnerabilities. It let CGM analysts focus only on meters with atypical data and report information in bulk, improving the team's response time.
- KRATOS: IoT energy control system built on SBM smart boxes, a commercial product of the company. I developed the mobile app and contributed to the embedded microcontroller programming.
- Flashing automation: Python tool that queues and runs multiple concurrent flashes, cutting binary initialisation time on the production line.
- Certificate generation bot: Node.js and LangGraph bot (PostgreSQL) that generates meter installation certificates in bulk for the production team. Connected to an LLM, it reads the meter consumption from a photo and adds it to the certificate along with the image and meter details. Includes role-based access control and per-user memory.

Full Stack Developer

Freelance · Jan 2024 - Present

Inventory and sales system: React Native mobile app for sales, inventory and staff payouts at a specialty coffee brand.
Sales and inventory system: web point-of-sale with customer debt tracking, inventory and ticket printing for a fishmonger.

PROJECTS

Matatena — AI agent for a real-time multiplayer game

TypeScript · LangGraph · Node.js · Supabase Realtime

- LangGraph state-machine agent harness with per-request routing and tool binding scoped to each node.
- Graceful degradation: if the LLM times out or goes down, a fallback over the agent plays the move and keeps the match alive.

EDUCATION

Universidad de los Andes

MSc in Software Engineering
2026 - Present

Universidad Industrial de Santander

BSc in Systems Engineering
2020 - 2025

LANGUAGES

English

Level B1 · ULA Idiomas, 2024-2025
Technical reading, writing and everyday conversation

CERTIFICATIONS

Alura Latam: Java and the Spring Framework · Artificial Intelligence and Java · OOP in Java · SQL with MySQL Server