Manoel Vitor Portela Valencia
AI & Software Engineer | Computer Vision · Edge AI (NVIDIA Jetson) · Python/FastAPI · TypeScript
Curitiba, Brazil · Open to relocation anywhere in Europe | +55 92 99302-9772 | manoelvalencia25@gmail.com
LinkedIn: linkedin.com/in/mvitorportela | GitHub: github.com/D3SKTOP1

Skills

- Computer Vision & Edge AI: NVIDIA Jetson, DeepStream, TensorRT, PeopleNet, OpenCV, YOLO, object detection & tracking
- AI: RAG, pgvector, LLM integration & tool calling (Claude, OpenAI)
- Backend: Python, FastAPI, Node.js, PostgreSQL, SQLite, Redis/BullMQ, Prisma, Supabase, REST APIs
- Frontend & Mobile: TypeScript, React, Next.js, Tailwind CSS, React Native (Expo), Kotlin
- DevOps: Docker, Linux, Git, GitHub Actions, Vercel, Tailscale

Experience

SolverCam (NVIDIA Inception member) – Co-founder & CTO — Mar 2026 – Present
Curitiba, Brazil · Edge-AI startup turning existing store cameras into foot-traffic analytics

- Architected an edge-AI video analytics platform end to end (NVIDIA Jetson Orin Nano + DeepStream/TensorRT/PeopleNet, FastAPI/PostgreSQL backend, Next.js dashboard, React Native app), now running in production in a retail store.
- Scaled real-time inference to 7 cameras on a single Jetson at ~45% GPU utilization by moving detection to a TensorRT-optimized DeepStream pipeline.
- Processed 110k+ events in 11 days with 100% delivery by designing a store-and-forward outbox that survives network outages.
- Eliminated image transfer to the cloud by enforcing privacy by design (LGPD, Brazil's GDPR): only structured data leaves the store.
- Cut customer hardware cost by building a motion-triggered capture agent for existing Intelbras DVRs (Python, Windows service).
- Led a team of engineers using 30+ Architecture Decision Records and an AI-assisted GitHub workflow (task queue → coding agents → review).

Freelance Software Engineer – Automation & Web Systems — 2025 – Present
Remote

- Built JurisPI AI, a multi-tenant SaaS for IP law firms, delivering cited answers over each firm's documents with RAG on pgvector, plus background jobs for ingestion and deadline alerts (Next.js, Prisma, BullMQ).
- Built an AI analyst for Meta ad accounts that flags performance issues and generates executive PDF reports, replacing manual spreadsheet reporting (React, Graph API, Claude).
- Shipped a production e-commerce store with admin panel, Mercado Pago payments, live shipping quotes and stock reservation that prevents overselling during delayed payments (React, Supabase, PostgreSQL).
- Delivered client websites, including a gym chain site with unit finder and checkout integration (Next.js 16, React 19, Tailwind).

Panasonic do Brasil – Apprentice, Finance & Administration — Aug 2021 – Sep 2022
Manaus, Brazil

- Supported SAP operations and administrative routines; organized internal data.

Projects

- SolverCam Case Study – architecture and engineering decisions behind the edge-AI platform
- DVR Snapshot Agent · JurisPI AI · Meta Ads AI Dashboard – all at github.com/D3SKTOP1

Education

B.Sc. Computer Science – Wyden, Brazil — Expected 2026
Mechatronics Technician – SENAI, Manaus, Brazil — Completed

Additional Information

- Languages: Portuguese (native), English (advanced, B2/C1), Spanish (intermediate, A2/B1)
- Work authorization: Brazilian citizen; requires visa sponsorship (EU Blue Card eligible)
- Awards: Honorable Mention, Brazilian Robotics Olympiad (2019); FIRST LEGO League (2018, 2019)