

Matheus Gonçalves da Silva

AI Engineer | Machine Learning Engineer

Greater Porto Alegre, Brazil | Open to remote roles worldwide

+55 (51) 98563-7089 | matheusgonalves007@gmail.com | <https://www.linkedin.com/in/matheus-g-silva/>

<https://matheusg.pages.dev> | <https://github.com/Matheuszz03>

SUMMARY

Software developer focused on AI, with pipelines, APIs and databases in production in the gas metering industry. I integrated 6 test benches that handle 15k+ meters/month and work with telemetry from 30k+ meters in the field. I build products with LLMs and embeddings and have trained neural networks in PyTorch. Graduate student in Machine Learning Engineering at FIAP.

EXPERIENCE

Product Analyst, Technology & Development | Aépio | 03/2026 – present

- Built the Python REST API that connects 6 test benches to the central server. 15k+ meters/month flow through them, with approval checked automatically.
- Moved test data from a daily batch to real time, eliminating 1 h/day of manual extraction by the Quality team.
- Developed systems and telemetry analysis for a fleet of 30k+ meters in the field.
- Designed the production and telemetry databases (MySQL, SQL Server) and built dashboards, automated test validators and field-support apps.
- Integrated LLMs (Claude, Codex) into the daily engineering workflow.

Senior Lab Assistant | Aépio | 05/2025 – 02/2026

Lab Operator Level 3 | Aépio | 09/2024 – 04/2025

Lab Operator Level 1 | Aépio | 06/2024 – 08/2024

Lab Assistant | Aépio | 01/2024 – 05/2024

- In the lab roles: calibration and testing of gas meters.

PROJECTS

Desenho | Python, PyTorch, CNN, TypeScript

Trained a convolutional network on 240,000 Quick, Draw! drawings, reaching 93.1% accuracy on 30,000 test drawings across 30 categories. Applied int8 quantization and in-browser inference.

Sinalo | Python, Scraping, Embeddings, LLM

Built a product, now launching, that collects public posts and ranks them with embeddings and a score, using the LLM only on filtered candidates to cut cost.

Gotem | Python, FastAPI, Postgres, RLS, pytest

Built a product, now launching, that searches the web for copies of digital products, with queued scans, text and image comparison, and client isolation through Row Level Security.

Embalo | TypeScript, Next.js, Supabase, Stripe

Built an affiliate program for SaaS, now launching, with commissions calculated from Stripe payment events.

EDUCATION

- Graduate program in Machine Learning Engineering | FIAP | 08/2026 – 07/2027 (in progress)
- Systems Analysis and Development (tech degree) | Centro Universitário Cesuca | Completed 12/2025

SKILLS

- ML & AI: LLM, Embeddings, Machine Learning, PyTorch, Neural networks, CNN, Sentence Transformers
- Data: Ingestion pipelines, IoT telemetry, SQL, MySQL, SQL Server, Postgres, Data modeling
- Backend: Python, FastAPI, SQLAlchemy, Alembic, Task queues, REST APIs
- Frontend: TypeScript, React, Next.js, Tailwind
- Infra & quality: Git, Docker, Fly.io, Cloudflare, Supabase (RLS), pytest, Vitest, ruff

LANGUAGES

- Portuguese: native
- English: advanced