

# PEDRO NUNES PAGNUSSAT

+55 54 99960-0333 | [np.pedro.np@gmail.com](mailto:np.pedro.np@gmail.com) | [linkedin.com/in/pedronp](https://linkedin.com/in/pedronp)

## SUMMARY

AI/ML Engineer with 5+ years building production systems in healthcare, telecom, and finance. Expertise in LLMs, RAG, and ML pipelines. Delivered **\$2.2M+ annual revenue** and **72x performance gains**. Proficient in Python, AWS/GCP, and end-to-end ML system design.

## EXPERIENCE

### Elsevier

Senior AI Engineer

Sep. 2025 – Present

Remote

- Architected multimodal RAG system for visual retrieval across healthcare resources, enabling medical professionals to search clinical images and tables alongside text.
- Designed OpenSearch indexing schema with custom chunking and metadata enrichment, improving search relevance for complex medical queries.
- Built high-performance image retrieval API with S3 and DynamoDB integration with async streaming, achieving **sub-1-second** response times at scale.
- Optimized table extraction pipeline, improving retrieval accuracy by **15%** while reducing token consumption by **40%**.

### Telus Digital

Data Scientist

Nov. 2024 – Sep. 2025

Porto Alegre, Brazil (Hybrid)

- Built ML-powered pricing optimization system analyzing product and market features to identify optimal price for Telecom Infrastructure, generating **\$1.8M/year** in incremental revenue.
- Developed automated international roaming analysis system covering **160+ countries** (6x expansion from 25), replacing manual expert reviews and generating **\$440K/year** in revenue while freeing analysts for strategic work.

### Teia Labs (AI Startup)

Junior Data Scientist

Jan. 2024 – Nov. 2024

Porto Alegre, Brazil (On-site)

- Re-engineered embedding pipeline with parallelization and batching, achieving **72x speedup** and enabling daily vector database refreshes.
- Built LLM-powered sentiment analysis pipeline processing **40,000+ companies** for investment decision support.
- Deployed email summarization system using LLMs, reducing analyst review time by **4+ hours/week**.
- Created AI agent research tool synthesizing web data in under **40 seconds**.
- Integrated AI agents with RAG architecture across NoSQL and vector databases for unified cross-source retrieval.

### HP

Research and Development Data Scientist

Aug. 2021 – Jan. 2024

Porto Alegre, Brazil (Hybrid)

- Optimized SQL analytics queries reducing dashboard load times from minutes to under **5 seconds**.
- Migrated **30+ OMEN gaming dashboards** to Power BI, standardizing reporting infrastructure.
- Built a R&D for document intelligence: classification, NER-based auto-renaming, and semantic segmentation for document processing.

## EDUCATION

### MBA in Project Management and Agile Methodologies

Pontifical Catholic University of Rio Grande do Sul (PUC-RS)

Dec. 2025 – Dec. 2026

Porto Alegre, Brazil

### Bachelor of Science in Data Science and Artificial Intelligence

Pontifical Catholic University of Rio Grande do Sul (PUC-RS)

Mar. 2020 – Dec. 2024

Porto Alegre, Brazil

## TECHNICAL SKILLS

**ML/AI:** Python, PyTorch, Scikit-learn, Hugging Face, LangChain, LangGraph OpenAI API, RAG, LLMs, NLP, Computer Vision

**Data:** SciPy, BigQuery, PostgreSQL, DynamoDB, MongoDB, OpenSearch, Vector Databases

**Infrastructure:** AWS (S3, Lambda, EC2), GCP, Docker, Airflow, FastAPI, Git, Linux

**Spoken Languages:** Portuguese (Native), English (C1), Spanish (Conversational), Chinese (HSK1)