

PEDRO REICHOW

Senior AI Engineer • Data Specialist • Technology Entrepreneur

Santa Catarina, Brazil
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PROFESSIONAL SUMMARY

Experienced AI Engineer and Data Specialist with 5+ years building production-ready artificial intelligence solutions and scalable data systems. Expert in computer vision, large language model integration, and high-performance data pipelines processing 500GB+ daily. Proven track record of leading technical teams, founding technology ventures, and delivering innovative solutions across agriculture, healthcare, and fintech. Strong background in full-stack development, cloud architecture, and emerging AI technologies.

PROFESSIONAL EXPERIENCE

Capgemini Brasil

Senior Solutions Consultant (Solutions Consultant IV)

Jan 2025 - Present

Lead enterprise-level AI and data engineering solutions for large-scale clients, specializing in knowledge graphs, fraud detection, and generative AI implementations.

- Agentic AI Infrastructure:** Architected microservices in Python for serving agentic AI systems with RAG capabilities and intelligent document indexing for enterprise clients
- Ontology Development:** Built sophisticated ontologies using Protégé and RDF/OWL, integrated with Anzo Analytics for complex business intelligence and fraud risk analysis
- Graph Database Solutions:** Developed advanced graph navigation interfaces using TypeScript and Cytoscape.js for fraud detection, usage pattern analysis, and risk assessment
- Team Leadership:** Collaborate with 50+ engineers and consultants on enterprise-scale data engineering optimizations and generative AI solutions

Trinnix AI Lab

AI Engineer & Computer Vision Specialist

Feb 2024 - Nov 2024

Led development of AI solutions focusing on computer vision and LLM integration for agricultural technology and precision farming applications.

- Computer Vision Systems:** Developed and deployed agricultural monitoring systems using YoloX and Roboflow, achieving >95% accuracy in plant disease detection and livestock behavior analysis
- Knowledge Graph Development:** Built ontological knowledge graphs using Neo4j for agricultural data analysis and business intelligence
- AI Integration:** Integrated multiple LLMs (GPT-4o, Claude 3.5, Gemini 1.5) with advanced prompt engineering for automated reporting and intelligent alerting
- Full-Stack Development:** Built scalable TypeScript platforms with tRPC and Node.js for geospatial analysis and real-time insights

Simulated Reality (Healthcare Technology)

Senior Full Stack Engineer & VR Developer

Feb 2023 - Feb 2024

Led development of virtual reality applications for healthcare training and wellness, ensuring HIPAA and FedRAMP compliance.

- VR Development:** Built VR training platforms using Node.js and React with 3D physics simulations and real-time interaction systems
- Data Analytics:** Created comprehensive analytics dashboards with Chart.js for training effectiveness measurement and user progress tracking
- Cloud Infrastructure:** Implemented scalable Azure App Service architecture with Red Hat OpenShift containers for enterprise healthcare deployment
- Real-time Systems:** Built asynchronous processing pipelines using Redis and RabbitMQ for handling large 3D video files and Unity/Unreal game updates

QI Tech (Fintech Research)

Senior Data Engineer

Mar 2022 - Feb 2023

Led development of large-scale financial data processing systems and machine learning models for banking-as-a-service platform.

- Big Data Engineering:** Architected PySpark pipelines processing 500GB+ daily financial transactions on Google Cloud Dataproc, achieving 40% performance improvement
- Real-time Processing:** Implemented Spark Structured Streaming for live transaction analysis with windowed aggregations and watermarking
- Data Architecture:** Designed Delta Lake implementation on GCS with ACID transactions and time travel capabilities for audit compliance
- Microservices Development:** Built high-performance gRPC microservices processing 100,000+ daily requests with 150ms average latency

PecSmart (IoT & Agricultural Technology)

Backend Developer & IoT Specialist

Dec 2021 - Feb 2022

Developed IoT systems for precision livestock monitoring using embedded devices and machine learning.

- IoT Development:** Built sensor integration systems on Raspberry Pi for livestock monitoring, processing multi-modal data (audio, visual, environmental)
- Data Pipelines:** Created end-to-end processing pipelines for real-time livestock health prediction and behavioral analysis
- Edge Computing:** Implemented distributed solutions using BalenaCLI for remote device management and deployment

Fontes Promotora

Backend Developer

May 2021 - Oct 2021

Developed web scraping, automation, and data processing solutions for enterprise clients.

- Web Scraping Solutions:** Built robust data extraction systems using Scrapy and Requests for enterprise data collection
- API Development:** Created scalable APIs using FastAPI, Flask, and Django REST Framework for client applications
- Data Processing:** Implemented advanced data processing pipelines with Pandas for business intelligence solutions
- Full-Stack Solutions:** Delivered complete applications using ReactJS frontend with cloud deployment on AWS and Docker

ENTREPRENEURIAL EXPERIENCE

MoveUp AI (San Francisco, CA - Remote)

Founding Engineer & Technical Co-founder

Jan 2025 - Present

Co-founding AI-powered workforce intelligence platform serving 15+ enterprise teams with integrated Slack workflows, knowledge graphs, and team analytics.

- MCP Architecture:** Architected TypeScript MCP (Model Context Protocol) servers enabling seamless AI agent communication across enterprise tools and workflows
- AI Agent Development:** Built sophisticated Python agents using Agno, LangChain, and LangGraph for intelligent team insights and automated workflow orchestration
- Knowledge Graph Systems:** Implemented Zep memory systems and Supabase vector databases integrated with commercial LLMs (Anthropic, OpenAI) for contextual team analytics
- Enterprise Integrations:** Developed comprehensive Slack integrations and N8N automation workflows serving 15+ enterprise teams with productivity insights and AI-powered assistance

TECHNICAL EXPERTISE

Artificial Intelligence & Machine Learning

Computer Vision (YoloX, OpenCV), Large Language Models (GPT-4o, Claude, Gemini), Natural Language Processing, Prompt Engineering, Neural Networks, Deep Learning Frameworks

Data Engineering & Big Data

Apache Spark (PySpark, Spark SQL, Streaming), Apache Airflow, Delta Lake, Data Lake/Warehouse Architecture, ETL/ELT Pipelines, Data Modeling, Performance Optimization

Programming & Development

Python, TypeScript, JavaScript, SQL, Node.js, React, Django, FastAPI, Flask, GraphQL, gRPC, Microservices Architecture

Cloud & Infrastructure

AWS (S3, Redshift, Glue, Lambda, EMR), Google Cloud Platform (BigQuery, Dataproc, Composer), Azure, Docker, Kubernetes, Infrastructure-as-Code, CI/CD

Specialized Technologies

Knowledge Graphs (Neo4j), IoT Systems (Raspberry Pi), Virtual Reality Development, Geospatial Analysis, Real-time Systems, Distributed Computing

Development Practices

Test-Driven Development (TDD), Performance Optimization, System Architecture Design, Technical Documentation, Agile Development, Team Leadership

EDUCATION & ACADEMIC BACKGROUND

Bachelor of Science in Systems Analysis and Development

Estácio University

2021 - 2023

Bachelor of Science in Electrical Engineering

Federal University of Santa Catarina (UFSC)

2017 - 2023

Technical Diploma in Electrotechnics

Federal Institute of Santa Catarina (IFSC)

2012 - 2016

AREAS OF EXPERTISE & INNOVATION FOCUS

Artificial Intelligence Applications

Computer Vision, Natural Language Processing, Multi-modal AI Systems, Edge AI Computing

Emerging Technologies

IoT Integration, Virtual/Augmented Reality, Blockchain Applications, Quantum Computing Preparation

Data Science & Engineering

Large-scale Distributed Systems, Real-time Analytics, Knowledge Graph Technologies, Performance Optimization

Applied Research Domains

Agricultural Technology, Healthcare Innovation, Financial Technology, Smart City Solutions

KEY ACHIEVEMENTS

- Built agricultural AI systems achieving >95% accuracy in disease detection for precision farming applications
- Architected financial data processing systems handling 500GB+ daily transactions with 40% performance improvement
- Pioneered healthcare VR applications compliant with HIPAA and FedRAMP standards
- Founded technology consulting practice delivering enterprise automation solutions
- Expertise in multiple programming paradigms and cutting-edge technologies across AI, data engineering, and cloud computing