

# ALEJANDRO ORTIZ PERDOMO

## AI Engineer | Machine Learning Engineer

📍 Bogotá, Colombia    📞 +57 319 666 3193    ✉ alejortizp@gmail.com

[LinkedIn](#) | [alejortizp](#)

### PROFESSIONAL PROFILE

AI Engineer specialized in **GenAI/RAG** and **LLMs** with proven track record productionizing solutions on **Azure**. End-to-end experience from research to production deployment with **MLOps**. Developer of intelligent agents with **LangChain** for enterprise workflow automation. Combines strong mathematical foundation (Statistics) with modern software engineering (CI/CD, Docker) to build scalable and reliable AI systems.

### WORK EXPERIENCE

#### AI Developer Consultant

Jun 2025 - Present

##### Periferia IT

- **CV-Job Matching System:** Built complete pipeline with **Azure Document Intelligence** + **AI Search** processing 500+ CVs/day with 95% extraction accuracy. Semantic search with embeddings reduced screening time by **70%**.
- **Intelligent Automation:** Implemented vectorization and optimized semantic chunking for candidate-job matching, improving recommendation quality by **40%** vs. traditional keyword search.
- **Impact:** System handling **10k+ searches/month** with <200ms latency. Stack: Python, Azure AI Search, Document Intelligence, FastAPI.

#### Machine Learning Engineer

Sep 2023 – Jun 2025

##### Global Hitss

- **GenAI & RAG:** Designed and deployed conversational agent with RAG that reduced support tickets by **40%**, processing **10k+ queries/month** with 85% resolution without escalation. Stack: LangChain, Azure OpenAI, FAISS.
- **MLOps:** Implemented CI/CD pipeline in **Databricks** + **MLflow** reducing deployment time from 2 weeks to **2 days**. Production models with automatic drift monitoring and retraining.

### EDUCATION

#### Master in Software Engineering

[Universidad de los Andes](#)  
2025 - In Progress

#### B.S. in Statistics

[Universidad del Valle](#)  
2011 - 2016

#### Data Science Diploma (DS4A)

Correlation One, 2022

#### Deep Learning Diploma

Univ. Autónoma Occidente, 2023

### TECH STACK

#### GENAI & LLMS

**LangChain** ★★★★★★ (Agents, RAG)

**Azure OpenAI** ★★★★★★ (GPT-4, Embeddings)

**Prompt Engineering** ★★★★★★

**Vector DBs** ★★★★★★ (FAISS, Pinecone)

#### AZURE AI & CLOUD

**Azure AI Search** ★★★★★★

**Document Intelligence** ★★★★★★

**Databricks + MLflow** ★★★★★★

#### ML/DL FRAMEWORKS

**PyTorch** ★★★★★★ | **TensorFlow** ★★★★★★

**Scikit-learn, XGBoost, LightGBM** ★★★★★★

**Hugging Face Transformers** ★★★★★★

- **Reinforcement Learning:** Productized *Next Best Offer* (NBO) system with A/B testing that increased conversion by **15%** and revenue by **\$10k per person**.
- **Churn Model:** Developed predictive model with **Lift of 3.0** and 82% recall in top decile, integrated to CRM for proactive retention. Impacted **50k+ customers**.

## Machine Learning Consultant

Aug 2023 – Sep 2023

### Grupo CINTE

- **Observability:** Designed a methodology for *data/model drift* detection with automated alerts for retraining.
- **Efficiency:** Optimized LightGBM and Random Forest algorithms for better computational performance.

## Data Scientist

Mar 2023 – Jul 2023

### NAE

- **Contactability Model:** Developed **LightGBM** model that increased effective contact rate by **60%** (from 25% to 40%), optimizing time windows and channels. Impacted campaigns with **100k+ contacts/month**.

## OPEN SOURCE PROJECTS

### **Email Agent with LangChain** [github.com/alejortizp/email-agent](https://github.com/alejortizp/email-agent)

Intelligent agent that queries emails via IMAP, classifies with LLM, and generates contextual automatic responses. Reduces response time by **80%**.

**Stack:** LangChain, Azure OpenAI, IMAP, Python, Prompt Engineering

### **NL-to-SQL/Pandas Agent** [github.com/alejortizp/nl-to-code](https://github.com/alejortizp/nl-to-code)

Agent that translates natural language to SQL queries and Pandas operations. Includes code validation, secure sandbox execution, and automatic results visualization.

**Stack:** LangChain, SQL, Pandas, Code Interpreter, ReAct Pattern

### **RAG Restaurant Ordering System** [github.com/alejortizp/rag-ordering](https://github.com/alejortizp/rag-ordering)

Conversational ordering system with RAG over restaurant menu. Agent processes product selection in natural language, generates invoices, and calculates totals. Includes inventory management.

**Stack:** LangChain, FAISS, Azure OpenAI, FastAPI, Streamlit

## MLOPS & ENGINEERING

Python, SQL, PySpark

★★★★★

Docker, CI/CD ★★★★★

FastAPI, Streamlit ★★★★★

Git, GitHub Actions ★★★★★

## POWER SKILLS

Effective Communication

Problem Solving

Analytical Thinking

Team Collaboration

Adaptability

Continuous Learning

Time Management

Technical Leadership

## LANGUAGES

 **Spanish**

Native

 **English**

Professional Proficiency  
(B2/C1)

## CERTIFICATIONS

### Intro to Version Control with Git and GitHub

Univ. de los Andes, Sep 2025

### NLP Specialization (RAG/Transformers)

Coursera, Jun 2025

### PyTorch Ultimate

Coursera, Mar 2025

### MLOps and Databricks

Netec, Dec 2024

### AWS Cloud Practitioner

Udemy