

# ALEJANDRO ORTIZ PERDOMO

AI Engineer | Machine Learning Engineer

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## 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.

## 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

## LANGUAGES

### Spanish

Native

### English

Professional Proficiency  
(B2/C1)

## POWER SKILLS

Effective Communication

Problem Solving

Analytical Thinking

Team Collaboration

Adaptability

Continuous Learning

Time Management

Technical Leadership

## CERTIFICATIONS

### Intro to Version Control with Git and GitHub

Univ. de los Andes, Sep 2025

# Machine Learning Engineer

Global Hitss

Sep 2023 – Jun 2025

- **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.
- **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

## NLP Specialization

(RAG/Transformers)

Coursera, Jun 2025

## PyTorch Ultimate

Coursera, Mar 2025

## MLOps and Databricks

Netec, Dec 2024

## AWS Cloud Practitioner

Udemy

## 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  


### MLOPS & ENGINEERING

Python, SQL, PySpark  


Docker, CI/CD 

FastAPI, Streamlit 

Git, GitHub Actions 