

Alexander Palacio

Data Engineer

Contact

Bogotá, Colombia
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Education

Universidad Internacional de La Rioja,
UNIR, Spain
Master's Degree in Big Data Analysis
and Visualization

Technical Skills

Languages: Python, SQL, Java,
C#, Bash

ETL / ELT: Azure Data Factory,
Databricks, Airflow

Big Data: Spark, Delta Lake, Kafka

Databases: SQL Server, PostgreSQL,
Oracle, MongoDB

Caches: Redis, MemCache

Cloud: Azure (Data Lake, EventHub,
Synapse, Functions)

DevOps: Git, CI/CD (Azure DevOps,
GitHub Actions), Docker, Jenkins

Others: Power BI, Data Visualization,
Dimensional Modeling, Medallion
Architecture, Data Vault 1.0, RESTful,
Scrum Agile development
methodology, Mlflow, Unity Catalog,
LLM, RAG, VS Code

Summary

Senior Data Engineer with 10+ years in technology and 3+ years specializing in **scalable data pipelines, cloud migrations (Azure), and batch/streaming data processing**. Skilled in **Python, SQL, PySpark and Bash**, with expertise in **event-driven architectures, microservices, and Databricks**. Experienced in building **end-to-end analytics solutions**, including **Power BI Embedded applications**, to deliver real-time insights and large-scale advanced analytics.

Experience

AUGUST 2018 - PRESENT

DIAN | Gestor II (Data engineer)

2025: Proposed and developed a **Generative AI agent (Genie space)** in Azure Databricks for consumption and training of gold datasets within a medallion architecture. Designed to help end users better understand query requirements on gold layers, generating query results and visual outputs.

Proposed and developed a **Generative AI RAG agent in Azure Databricks** to explain Power BI portal usage, including creating, publishing, and promoting dashboards, and guiding teams on access and permissions.

2024: Proposed and developed a centralized web portal for enterprise dashboards, integrating the presentation layer of the data architecture to enhance decision-making at all levels, based on processing and storage in Azure Databricks. Implemented with Azure Databricks, Databricks Apps, Databricks SDK, and Flask.

2023: Proposed and developed a centralized web portal for enterprise dashboards, aligning with the presentation layer of the data architecture to improve decision-making at all levels. Implemented using Azure Table Storage, Azure Automation, Azure Power BI Embedded, C#, and Python.

2022: Maintained and enhanced a document ingestion pipeline orchestrator for Electronic Invoice v2, leveraging Azure Databricks, Azure Data Lake, and Azure Data Factory within a medallion architecture. Integrated Cosmos DB for storage and Power BI for business intelligence reporting.

2021: Designed and implemented parallelizable ETL pipelines in Pentaho Spoon to support a customs and foreign-exchange compliance risk management system, optimizing data processing and integration on Oracle Database.

2020: Designed and deployed a scalable, fault-tolerant big data platform to process historical Electronic Invoice v1 (DIAN, Colombia) records.

Developed data pipelines using Hadoop and Apache Spark, integrated Apache Kafka for ingestion, and delivered business insights through MongoDB and Microsoft Power BI.

APRIL 2016 – JULY 2017

TRANSPORTSYSTEMS | Full-Stack Engineer

2016: Developed features for PayU's high-availability online payments platform. Built integration modules with payment networks (Falabella, Transbank, SPEI) and VISA Rewards (IATAI Colombia). Delivered mobile app functionalities (Offrier, Parkcero), contributed to application architecture, and supported external system integrations. Evaluated new technologies and ensured compliance with project standards.

Professional Training & Certifications

- Mastering Azure Databricks for Data Engineers Specialization, PacktPackt Issued Sep 2025 Credential ID Q6W47HHCE6GV
- Databricks Fundamentals Learning Plan Databricks Fundamentals Learning Plan Databricks Issued Oct 2024
- Leading Work Teams Specialization University of Palermo Issued Oct 2024 Credential ID F43F59X4801U
- AZ-900: Microsoft Azure Fundamentals AZ-900: Microsoft Azure Fundamentals
- Microsoft Issued Feb 2023 Credential ID 3423B1660EADB08C
- Scrum Fundamentals Certified CertificationScrum Fundamentals Certified Certification Issued May 2017 Credential ID 594119

Languages

- **Spanish**– Native
- **English** – Upper-Intermediate (B1+)