

MILTON FIGUEROA

Data Engineer & Data Analyst · Data Science & AI/LLM · Python, Big Data & BI · Oracle SQL/ETL
milfig18@gmail.com · linkedin.com/in/milton-figueroa-921193217 · Madrid area · Remote / Hybrid

PROFESSIONAL PROFILE

Data professional with 7+ years of production experience across database architecture, ETL and backend development. At Orange I moved from Level 2 support technician to data analyst and database architect, designing Oracle schemas and Node.js REST APIs for 3 production systems with 15,000+ users, acting as the technical-functional bridge between business and development: gathering requirements, defining KPIs and leading a development team in my final year. After finishing my Master's in Data Science and AI in September 2026, I keep building on this base in several directions: generative AI and agents (a working RAG chatbot with Chroma, OpenAI and Anthropic APIs, and multi-agent systems with LangChain/LangGraph), Big Data and cloud platforms (PySpark, Parquet, BigQuery, Azure Data Factory, Databricks), BI tools (Power BI, Tableau) and full stack development (Angular, React, C#/.NET).

WORK EXPERIENCE

Collaborator · AI-assisted development · Database administration and design

Valfiguer · Spain

January 2026 – Present

- I collaborate on AI-assisted programming tasks and on the design and administration of the company's databases, alongside the Master's in Data Science and AI.

Level 2 Support Technician → Data Analyst · Database Architect · Node.js Backend · Deployment Lead

Orange · Spain

March 2017 – November 2024 (7 years 9 months)

March 2017 – November 2018 · Level 2 Support Technician

- Resolved Level 2 technical incidents for internal systems and users, gaining deep knowledge of the operations and databases of the company's projects: the basis of my move into data and development.

November 2018 – November 2024 · Data Analyst · Database Architect · Node.js Backend · Deployment Lead

- Designed the full Oracle database architecture for 3 production projects (customer management, incidents and chat), defining entities, relationships, PKs, FKs and indexes for systems with 15,000+ users and up to 1,200 concurrent sessions.
- Built a dimensional (star schema) model for the customer management platform, supporting business reporting beyond the transactional model.
- Worked directly with business stakeholders to gather requirements and define KPIs, documenting formal functional/non-functional specifications when needed.
- Designed and developed the Node.js backend layer for the 3 systems, exposing and consuming REST APIs, and helped on React frontend development beyond my main duties.
- Built and maintained ETL pipelines with ~10 GB of daily updates, with post-load quality checks, anomaly detection and source-to-target reconciliation.
- Automated 50+ recurring load and reporting processes, and collaborated with other teams using MySQL and MongoDB for cross-system data needs.
- Optimised 15+ critical production SQL queries using window functions and CTEs, cutting execution times from minutes to seconds.
- Implemented database-level security (SQL injection defence, encryption, RBAC) ensuring GDPR compliance, and supported internal validation and end-user confirmation before each release (UAT-style process).
- Managed the full deployment cycle of the 3 systems and led the development team during the last year of the project, training new members and reviewing their code before each release.

PERSONAL PROJECTS AND APPLIED PRACTICE

AI, LLM and Agents — Master's project and personal practice (since 2025)

- Built and ran a Retrieval-Augmented Generation (RAG) chatbot using Chroma as vector database, integrating the OpenAI and Anthropic APIs, plus experience running LLMs locally.
- Built and tested multi-agent systems with LangChain/LangGraph, and applied prompting strategies such as zero-shot, few-shot, chain-of-thought and ReAct.
- Qualitatively compared response quality across prompts and models, and trained myself in Responsible AI principles and the European AI Act.

Big Data and Cloud Platforms — Master's and applied project

- Used PySpark and Parquet files for data processing in the Master's and personal projects.
- Queried and extracted data from BigQuery, Azure Data Factory and Databricks as part of a data project.

BI and Analytics — Master's project and courses

- Designed an interactive Power BI report on video game data, with DAX measures and table relationships, and completed two Tableau courses with basic practice dashboards.
- Practised A/B test design, funnel analysis and cohort/LTV concepts, and set up basic Google Tag Manager tags, all in personal projects and Master's content.

Full Stack and DevOps — Personal projects

- Built two personal web applications with Angular and developed C#/.NET applications, including an exercise for a technical interview process.
- Set up a CI/CD pipeline for a personal project with Git-based tools (GitHub/GitLab), and explored basic Azure and AWS services.

EDUCATION

Master's in Data Science and Artificial Intelligence

Evolve · Spain

January 2026 – September 2026

Python · Applied Statistics · Machine Learning · Power BI · Microsoft Fabric

Higher Vocational Diploma — Computer Application Development

IES Brianda de Mendoza · Spain

TECHNICAL SKILLS

AI / LLM and GenAI	RAG · Chroma (vector database) · OpenAI and Anthropic APIs · LangChain/LangGraph (multi-agent) · Prompt engineering
Data engineering	ETL pipelines · PySpark · Parquet · Data quality and validation · Apache Airflow (evaluated) · Python (basic knowledge, developing)
BI and analytics	Power BI (DAX) · Tableau · A/B testing (practice) · Funnel and cohort/LTV analysis (practice)
Cloud and data platforms	BigQuery (Google Cloud) · Azure Data Factory · Databricks · Azure and AWS (exploratory)
Databases and SQL	Oracle Database · SQL (window functions, CTEs) · PL/SQL · MySQL · MongoDB (NoSQL) · SQL Server and PostgreSQL (personal)
Full stack development	Node.js (professional) · Angular · React (collaborative) · C#/.NET (personal) · REST APIs
DevOps and tools	Git (GitHub, GitLab) · CI/CD pipelines · Google Tag Manager (basic) · Docker and MLOps (learning)
Security	RBAC · SQL injection defence · Encryption · GDPR compliance
Business and delivery	Requirements gathering · KPI definition · Functional/non-functional specifications · UAT-style validation · Team leadership
Languages	Spanish (native) · English (professional)

CERTIFICATIONS

- Foundations: Data, Data, Everywhere — Google / Coursera
- Ask Questions to Make Data-Driven Decisions — Google / Coursera
- Crash Course on Python — Google / Coursera