



Pablo Catret

Data Scientist with strong quantitative skills and hands-on experience applying **AI** to real-world challenges in sectors such as climate and agriculture. Results-driven and an effective communicator, focused on transforming **data** into actionable **business value**. Keen to support innovation and decision-making through tech.

CONTACT INFORMATION



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SKILLS

Data & AI:

Python, R, Machine Learning (Scikit-learn, Mlib), Deep Learning (Tensorflow, PyTorch), Statistics, Optimization, pySpark

Cloud & Automation:

AWS, Airflow, Docker, FastAPI, Git

Databases & Visualization:

SQL, Neo4J, MongoDB, Cassandra, PowerBI

Business & Communication:

A/B Testing, Causal Inference, Financial Analytics (KPIs), Project Communication, Agile teamwork and technical presentations to stakeholders

Generative AI & NLP:

LLMs, LangChain, RAG, Autonomous Agents, Webscraping, HuggingFace Transformers

LANGUAGES

Spanish & Valencian: Bilingual (C1 JQCV)

English: Fluent (C2 EF SET, B2 PACLE)

German: Intermediate (B1 EOI)

Italian: Intermediate (3 years living in Italy)

EXPERIENCE

Data Science Researcher

IRTIC

Sept. 2024 – Present

- Developed AI/ML models for anomaly detection, classification, and forecasting using environmental and remote sensing data.
- Designed automated data pipelines (ETL) for large-scale scientific projects.
- Published research in high-impact journals (Q1) and presented at international conferences.
- Collaborated with multidisciplinary teams to deliver actionable insights for public and private stakeholders.

Data Science Intern

Capgemini

Feb. 2024 – Jun. 2024

- Contributed to an Anti-Money Laundering (AML) fraud detection project using Explainable ML and Graph ML.
- Worked on applied ML projects in smart cities and infrastructure monitoring.
- Hands-on training in Large Language Models (LLMs) and Generative AI with a focus on enterprise integration.
- Strengthened communication skills through cross-functional collaboration.

Data Science Research Collaborator

IRTIC

Jan. 2023 – Sept. 2024

- Built and evaluated ML/DL models for time-series forecasting in environmental science.
- Co-authored scientific articles and participated in international research initiatives.

EDUCATION

MSc in Data Science - University of Valencia

Sept. 2024 – Present · GPA: 9.48/10

BSc in Mathematics - University of Valencia

Sept. 2020 – Jul. 2024 · GPA: 8.63/10

MAIN CERTIFICATES:

Stanford University: Machine Learning Specialization

NYIF: Machine Learning for Trading Specialization

Yale University: Financial Markets (with honors)

AWS: Generative AI with Large Language Models

John Hopkins University: Advanced Statistics for Data Science Specialization

Politecnico di Milano: Project Management Specialization

IBM: AI Workflow: Feature Engineering and Bias Detection; Scalable Machine Learning on Big Data using Apache Spark

OTHER RECENT PROJECTS:

- **ML** pipelines in **AWS** for real-time inference (2025)
- **Dockerized Airflow pipeline** for financial time-series, anomaly detection, and persisting processed data in PostgreSQL (2025)
- **AI assistant agent** for farmers, integrating **LLMs** and agronomic data (Currently)
- **Author** of "**A/B Testing**: Guía Práctica para Resultados Reales" (2025)