

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

Phone: +34 644 722 668 E-Mail: pablo.catret@gmail.com <u>LinkedIn</u>: pablo-catret <u>Personal Website</u>

SKILLS

Data & Al:

Python, R, Machine Learning, 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

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 prediction and 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

Politocnico di Milano: Project Management Specialization

Politecnico di Milano: Project Management Specialization IBM: Al 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)
- Al assistant agent for farmers, integrating LLMs and agronomic data (Currently)
- Author of "A/B Testing: Guía Práctica para Resultados Reales" (2025)