Pedro Garzón Carmona

AI Engineer · LLM Agents, RAG & Machine Learning for Finance

Madrid, Spain • +34 660049956
pedroc.garzon@gmail.com
linkedin.com/in/pedrogarzoncarmona

Profile

AI engineer with an MSc in Telecommunication Engineering (UC3M) and hands-on experience delivering AI solutions in corporate finance. At Telefónica Group Treasury, responsible for identifying automation opportunities with business teams and delivering **LLM agents, RAG assistants, forecasting models and data pipelines** end to end, from scoping to production and maintenance. Solid financial background (CFA Investment Foundations) and experience working with international teams in English.

Technical Skills

LLMs & Agents	LangChain, RAG, tool-calling agents, Ollama (local LLMs), Azure OpenAI, Copilot Studio, Google ADK, Hugging Face, prompt engineering
Machine Learning	PyTorch, Scikit-learn, XGBoost, time-series forecasting, BERTopic, FinBERT, SHAP, walk-forward validation
Data & Cloud	Python, SQL, Pandas, NumPy, Google BigQuery, Azure, FastAPI, REST APIs, Selenium
Automation & BI	Power Automate, Power BI, Streamlit, Dash, SAP data
Engineering	Git/GitHub, Linux, VS Code, Google Colab, Claude Code
Finance	FX markets, treasury & cash management, VaR, Sharpe ratio, stress testing

Experience

Financial Systems & AI Automation Analyst 06/2026 – now
Telefónica S.A. · Group Treasury · Madrid

- Lead AI adoption for Treasury: discover processes worth automating, agree requirements with the business and own delivery **end to end**.
- Shipped an **LLM reconciliation agent** for payments and bank receipts on SAP data, freeing ∼1 h/day for each of 4 analysts.
- Launched **RAG assistants** that answer questions over Treasury databases and explain how to operate with each bank.
- Created **cash-flow forecasting models** feeding liquidity planning.
- Wired **BigQuery** pipelines and **Power Automate** flows into **Power BI** dashboards that read live from BigQuery.
- Evaluated **Copilot Studio** and **Google ADK** for corporate agents; wrote the architecture guide and executive deck.
- Run daily check-ins with Treasury teams and deliver remote rollouts for **Telefónica Netherlands**, fully in English.

Machine Learning Intern – Quantitative Finance (Talentum) 06/2025 – 05/2026
Telefónica S.A. · Madrid

- Trained **FX trend-prediction models** (XGBoost, deep learning) to inform currency-risk decisions.
- Deployed open-source LLMs **on-premise with Ollama**, keeping sensitive financial documents inside the company network.
- Connected internal tools to **Azure OpenAI**, handling API keys, endpoints and access securely.
- Built NLP pipelines (**BERTopic**, **FinBERT**) that turn market news and reports into topic and sentiment signals.
- Measured business value with **VaR, Sharpe ratio and stress tests**; shared results via Power BI, Streamlit and Dash.

Education

MSc Telecommunication Engineering (Bilingual, AI/ML track) · Universidad Carlos III de Madrid 2024 – now
BSc Telecommunications Engineering (Telematics) · Universidad de Granada 2020 – 2024
Erasmus+ exchange, Electrical Engineering · Technical University of Munich (TUM) 2022 – 2023

Selected Projects

FX Forecasting with Multimodal Deep Learning MSc thesis
Universidad Carlos III de Madrid

- Cross-attention model combining technical indicators with **FinBERT** sentiment from ECB press conferences (collected with a custom Selenium scraper).
- Benchmarked against an **XGBoost** baseline (triple-barrier labels, walk-forward validation, SHAP) and the **Amazon Chronos** foundation model, with a strict anti-leakage setup.

Conversational Trading Agent Personal project
Python · Telegram · DEX APIs

- LLM agent that reads Telegram messages and places orders on perpetual DEXs (RISEx) via API.

Certifications & Languages

Certificates: IBM – Generative AI Applications with RAG and LangChain • CFA Institute – Investment Foundations
Languages: Spanish (native) • English (advanced, daily at work) • German (basic)