# EDUARDO GONZÁLEZ-MESONES DE LA SIERRA

Senior Data Scientist | AI & Machine Learning Specialist |  LLM & AgenticAI  developer

Madrid, Spain

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## PROFESSIONAL SUMMARY

Data Scientist with a strong mathematical foundation and extensive experience in machine learning, NLP, and AI-driven solutions.
Passionate about leveraging data to build impactful products and optimize decision-making.
Expertise in MLOps, XAI, NLP,GenAI & LLM finetunning.
Strong analytical skills, team-oriented mindset, and a continuous learning approach.
High-performance athlete combining elite-level field hockey with a professional career in AI and business solutions.

## EDUCATION

### Universidad Complutense de Madrid

*B.Sc. in Mathematical Engineering (2015-2020)*
- Advanced mathematical modeling and problem-solving skills.
- Machine learning model deployment and optimization using Python.

### EOI - Escuela de Organización Industrial

*M.Sc. in Data Science (2020-2021)*
- MLOps: Airflow, MLflow, Jenkins, Git.
- Data engineering: Hadoop, Hive, Apache Cassandra, MongoDB, Neo4j.
- NLP techniques and text mining.

### CoderHouse

*Full Stack Developer Course (2022-2023)*
- Web development: HTML, CSS, SCSS, JavaScript, Node.js.

### Tutellus Program

*DeFi-Web3-Blockchain (2024)*
Smart contracts, liquidity pools, staking, and blockchain data analysis.

## PROFESSIONAL EXPERIENCE

### ThetaRay, Madrid, Spain

*Senior Data Scientist (Nov. 2023 - Present)*
- Implemented AI/ML-based frameworks for coverage and risk management, enabling dynamic adaptation to emerging financial crime patterns and regulatory shifts

- Developed AML product solutions with semi-supervised and unsupervised models within Azure.

- Expert resource optimizer in PySpark

- MLops solution ( MinIO ,PostgreSQL, SparkSQL ,Tensorflow & Scikit-Learn, MLflow, Airflow, GitLab, Kubernetes)

-Develop LLM tools through fine- tuning (Lora, Qlora,adapters, prompt & prefix ,multi-stage) , agents and RAG.
- Entity resolution using MinHash, LSH, and distance algorithms.
- Applied SHAP and custom XAI methodologies for explainability.
- Designed ad-hoc BI tools and business risk feature engineering.
- Conducted data drift analysis and model performance monitoring.

### Banco Sabadell, Madrid, Spain

*Data Scientist - Risk Innovation (Mar. 2023 - Nov. 2023)*
- Developed machine learning models for consumer banking (mortgages, cards, personal loans).
- Conducted advanced analytics for business decision-making.

### Banco Santander, Madrid, Spain

*Data Scientist - Model Risk & Analytics (Oct. 2020 - Mar. 2023)*
- Built ML models using PySpark MLlib and Scikit-Learn.
- Automated internal processes with Power BI, QlikSense, and Python.
- Developed web apps for corporate platforms, integrating Google Analytics.
- Created Power Apps and automated workflows with Power Automate.

### CTC Technology, Santander, Spain

*R&D Intern - GPS Low Cost Project (Jul. 2019 - Aug. 2019)*
- Implemented GPS tracking solutions using MATLAB.

## TECHNICAL SKILLS

- **Machine Learning & AI**: Scikit-Learn, TensorFlow, Keras, PyTorch.
- **MLOps & Cloud**:

- Azure: MLflow, Airflow, Docker, MinIO.
- AWS (personal) : IAM, Lambda, SageMaker, BedRock.

- **Natural Language Processing** (NLP): NLTK, SpaCy, Hugging Face Transformers, LangChain, regex-based text processing.
- **Large Language Models** (LLMs): Ollama, Hugging Face models with  fine-tuning methods

- **AgenticAI**: Langchain, Langraph, LangSmith, CrewAI.

- **Data Engineering**: SQL, NoSQL (MongoDB, Cassandra, Neo4j), PySpark, PostgreSQL, MinIO.
- **Explainable AI (XAI)**: SHAP, LIME, counterfactual explanations, Integrated Gradients.
- **Software Development**: Python, R, API development (Flask, FastAPI), Git, CI/CD.
- **Business Intelligence**: Power BI, Qlik Sense.
- **Blockchain & DeFi**: Smart contracts, liquidity pools, staking, blockchain data analysis.

## LANGUAGES
- Spanish (Native)
- English (Fluent, C1)

## ADDITIONAL INFORMATION
- **Elite athlete**: Semi-professional field hockey player (Sanse Complutense, Spanish National Team - U16, U18, Senior).
- **Musician:** Former clarinet player at Jesús de Monasterio Conservatory.