Ricardo Prieto Álvarez

Al Engineer | Data Scientist

Madrid, Spain I ricardoprietoaiml@gmail.com I +34 649 53 05 13

Al Engineer & Data Scientist with experience designing end-to-end solutions using LLMs, Retrieval-Augmented Generation (RAG), and NLP techniques. Skilled in building agentic systems, multi-class text classification, and summarization of structured data. Strong background in Machine Learning, including churn prediction and customer segmentation. Proficient in Python. Strong communicator, proactive and solution-oriented, with a proven ability to explain complex ideas clearly. Self-taught, innovative, and highly adaptable in fast-paced environments.

Machine Learning & NLP | LLMs, Agents & RAG | Problem-Solving | Effective Communication | Adaptability & Self-Learning

PROFESSIONAL EXPERIENCE

Data Scientist, Al Engineer

Komorebi Al I Madrid, Spain

03/2024 - Present

Al Solutions with LLMs | RAG | NLP | Al Agents | Streamlit

- Delivered AI solutions by engineering agentic RAG systems with LLMs for automated grant proposal generation
- Developed NLP-driven RAG pipelines to query internal knowledge bases
- Leveraged LLMs to summarize and chat with structured data, enhancing decision-making
- Applied multi-class classification on CRM interactions to extract client insights
- Rapidly prototyped AI features with interactive Streamlit dashboards
- Integrated leading LLM platforms (OpenAI, Google Gemini, etc) for scalable NLP applications
- Employed TF-IDF, sentence embeddings and Shannon entropy to measure relevance and diversity of CRM interaction texts
- Utilized Named Entity Recognition (NER) for entity extraction and text classification, improving data utility for client segmentation

Consultor Assistant 1 - Data Scientist

Management Solutions I Madrid, Spain

07/2023 - 03/2024

- Development of a tool dedicated to the calculation of consumer credit profitability and its evaluation over time.
- Developing Data Mapping for a Data Migration on a Bank acquisition project.

Machine Learning Researcher

MasOrange, UC3M I Madrid, Spain

09/2022 - 09/2023

• Utilized Machine Learning techniques (Random Forest, XGBoost, logistic regression, multilayer perceptron) for churn prediction, achieving AUC > 0.85.

- Segmented datasets into stable vs. peak churn periods to ensure robust model validation.
- Applied clustering (KMeans, KModes, KPrototypes, DBSCAN) to identify high-risk customer segments and inform customer retention strategies.
- Performed Multiple Correspondence Analysis to uncover key drivers of defection and guide targeted retention initiatives.

Chatbot Developer for Health Authorities FAQ's using AWS, Azure and NLP

Internship; Novartis I Basel, Switzerland

07/2018 - 08/2018

For that Novartis needed an easy way to find the archived answers which fit best to the new question they received. In order to develop this, Novartis gave me two approaches to address the challenge:

- Semantic Search with ontology
- Creating a Q&A knowledge base and ChatBot
- Finally developed with Azure Bot Service

EDUCATION

Master of Science in Artificial Intelligence Research

Universidad Nacional de Educación a Distancia, Madrid, Spain

10/2024

Bachelor in Computer Science & Engineering

Universidad Carlos III de Madrid, Madrid, Spain

07/2023

Bachelor in Business Administration & Management

Universidad Carlos III de Madrid, Madrid, Spain

07/2023

PROFESSIONAL DEVELOPMENT

Al Agents Fundamentals

Hugging Face

Improving Deep Neural Networks: Hyperparameter Tuning Regularization and Optimization

DeepLearning.Al

Structuring Machine Learning Problems

DeepLearning.Al

Neural Networks and Deep Learning

DeepLearning.Al

Akademia Artificial Intelligence

Bankinter Foundation

SOFTWARE SKILLS

- OpenAl API
- Gemini API
- LlamaIndex

- TensorFlow,
- Keras
- python

- SHAP
- Scikit-Learn
- Pandas