



Álvaro Vilela Nova

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❖ Madrid, Spain ❖ [Portfolio](#) ❖ [LinkedIn](#)

WORK EXPERIENCE AND VOLUNTEERING

SOLUTE

August 2024 – Now

Data Scientist | AI Engineer

Badajoz, España

- Development of ML and Deep Learning models for energy demand and electricity price forecasting.

University of Extremadura

October 2018 – April 2019

Research assistant

Badajoz, Spain

- Participated in a sunspot observation and measurement project aiming to measure and forecast solar activity using the specialized equipment from the University of Extremadura's observatory. The results are sent to the Royal Observatory of Belgium to be used in the data of the Solar Influences Data Analysis Center.

EDUCATION

Complutense University of Madrid

September 2024

Master's Degree (M.C.A.), Big Data, Data Science & AI

Madrid, Spain

- Awarded for Master's Final Project – App for Querying of Audiovisual Content using Natural Language Models.
- Excellent scores (>9.0/10): SQL and NoSQL DBs, Python Programming, BI with Tableau, Statistics, Data Mining and Predictive Modeling, Machine Learning, Hadoop/Spark, Deep Learning.
- Completed projects related to machine learning and AI models, mostly related to data science. Worked with databases based on MySQL and MongoDB.

University of Extremadura

June 2024

Degree (B.Sc.), Mathematics

Badajoz, Spain

- Final Thesis – Descartes' Theorem and Its Relationship with Special Relativity.
- Relevant scores and honors (>9.0/10): Statistics, Computational Methods, Computer Science, Machine Learning, Statistical Sampling, Linear Models, Time-Series Modeling, Mathematical Statistics.
- Awarded an Erasmus+ scholarship of 10 months of education and cultural immersion abroad.
- Member of the University's Debate Club.

CERTIFICATIONS, SKILLS & INTERESTS

- **Certifications:** Certificates of completion issued by Codecademy on C, JavaScript, HTML, CSS and Bootstrap. English C2 achieved in the Language Assessment test by the Council of EU.
- **Skills:** Python; SQL; MongoDB; Git; PySpark; Kafka; Hadoop & Hive; Machine Learning Algorithms; Neural Networks and Deep Learning; NLP; ETL Pipelines; REST APIs; Microsoft Azure Databricks; ML and AI libraries such as Keras, TensorFlow, PyTorch, Sklearn or SciPy.
- **Languages:** Native Spanish; Fluent English (C2).
- **Interests:** weightlifting; speedrunning; grand strategy games; philosophy.