

Álvaro Vilela Nova

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WORK EXPERIENCE AND VOLUNTEERING

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

- 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.
- Only remaining course is the final project, which will be presented in September 2024.

University of Extremadura

June 2024

Degree (B.Sc.), Mathematics

Badajoz, Spain

- Excellent scores and honors (>9.0/10): Statistics, Linear Algebra, Calculus, Computational Methods, Geometry, Computer Science, Machine Learning, Statistical Sampling, Linear Models, Riemannian Geometry, Time-Series Modeling, Complex Variables, Numerical Methods, Mathematical Statistics, Differential Equations, Advanced Topology.
- Member of the University's Debate Club.

CERTIFICATIONS, SKILLS & INTERESTS

- **Certifications:** Certificates of completion issued by Codecademy on JavaScript, HTML, CSS and Bootstrap. English C2 on the EU Council Language Assessment test.
- **Skills:** Native Spanish; Fluent English (C2); Python; Fortran; MATLAB; GNU Octave; JavaScript; R; HTML; CSS; Bootstrap; SQL; MongoDB; Tableau; Excel; Git; PySpark; Kafka; Hadoop & Hive; Machine Learning Algorithms; Neural Networks (RNN, CNN, Time series forecasting with neural networks); NLP; ETL Pipelines; REST APIs; Microsoft Azure Databricks; ML and AI libraries such as Keras, TensorFlow, PyTorch, Sklearn or SciPy.
- **Interests:** weightlifting; speedrunning; grand strategy games; philosophy.