

# Álvaro Vilela Nova

alvarovilelanova@gmail.com ❖ +34 684015847 ❖ Madrid, Spain ❖ [Portfolio](#)  
[LinkedIn](#)

---

## 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*

- Final Thesis – Descartes' Theorem and Its Relation 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 JavaScript, HTML, CSS and Bootstrap. English C2 on the EU Council Language Assessment test.
- **Skills:** 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.
- **Languages:** Native Spanish; Fluent English (C2).
- **Interests:** weightlifting; speedrunning; grand strategy games; philosophy.