SERGIO RODRIGUEZ VALBUENA

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PROFILE

Final-year Data Science and Engineering student at Universidad Carlos III de Madrid with international academic experience and a strong background in Artificial Intelligence and Data Analytics. I am proactive and passionate about developing innovative, data-driven solutions.

EDUCATION

UNIVERSIDAD CARLOS III MADRID

Data Science and Engineering degree

GPA: 7.6/10

Madrid, España

2021 - Today

UNIVERSITY OF CALIFORNIA

Computer Science (3rd Year Exchange Student)

GPA: 3.58/4

California, United States

2023 - 2024

EXPERIENCE

Generative AI Engineer at MissiolA (Madrid, Spain)

January 2025 - Today

- Design and implementation of custom SaaS solutions for clients, applying generative AI to automate workflows and optimize processes.
- Full-stack web application development, integrating technologies such as artificial intelligence and databases.
- Workflow automation through programming, enabling better decision-making and improving efficiency.
- Integration of generative AI models and intelligent agents into real-world applications for enhanced user interaction and decision support.

Data Analyst I at PRGX (Madrid, Spain)

September 2024 – March 2025

- Process automation with Python and DBT
- ETL tasks and financial data analysis using SQL and Microsoft SQL Server.
- Business intelligence tools like Power BI for data validation
- Collaboration with international teams of analysts and auditors to ensure data integrity across financial recovery operations

Machine Learning Intern at Hito 1 (Asturias, Spain)

June – August 2024

- Development of a machine learning model for predicting spillway overflow events and their characterization.
- Feature engineering on hydrological and time-series data.
- Model validation and evaluation, using Random Forest and XGBoost.
- Data visualization for analysis and interpretation.

PROJECTS

Mobility and Routine Analysis for Mental Health Assessment

2024-2025

• Collaborated with eB2 (Evidence-Based Behaviour) to analyze large-scale geolocation data from mobile devices, identifying users' mobility patterns and daily routines. Applied clustering algorithms (DBSCAN), entropy analysis, and developed a mobility index to extract behavioral insights. Built an interactive dashboard and implemented machine learning models to predict clinical study groups based on movement patterns and routines.

LANGUAGES AND SKILLS

Languages: Spanish (native) English (C1 Cambridge) French, German, Italian (introductory coursework)

Programming & Query Languages: Python · JavaScript · TypeScript · R · Matlab · SQL · T-SQL

 $\textbf{Frameworks \& APIs:} \ React \cdot Flask \cdot TensorFlow \cdot PyTorch \cdot Scikit-learn \cdot XGBoost \cdot OpenAl\ API \cdot Anthropic\ API \cdot Anth$

 $\textbf{Python Libraries} : Pandas \cdot \text{NumPy} \cdot \text{Matplotlib} \cdot \text{Seaborn} \cdot \text{Streamlit} \cdot \text{Transformers} \ (\text{Hugging Face}) \cdot \text{OpenCV}$

 $\textbf{Databases} \colon \mathsf{Oracle} \cdot \mathsf{MongoDB} \cdot \mathsf{Microsoft} \ \mathsf{SQL} \ \mathsf{Server}.$

 $\textbf{Cloud \& Tools:} \ \text{Git} \cdot \text{Firebase} \cdot \text{Google Cloud Platform} \cdot \text{Microsoft Azure} \cdot \text{DBT} \cdot \text{Power BI}$