

# Francisco J Rodríguez

## Data scientist

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### Technical skills and knowledge:

- Native spanish speaker
- Office automation (Microsoft office, LaTeX, etc.)
- Advanced knowledge in mathematics, physics and chemistry.
- Python (Numpy, Pandas, Scipy, Astropy, Matplotlib, BeautifulSoup, Seaborn, Scikit-Learn, TensorFlow )
- R (ggplot2, caret, C50, sf, sp, geostat, etc.)
- Creation and evaluation of supervised models (linear and logistic regression, decision trees, random forest, etc.).
- Creation and evaluation of unsupervised models (knn clustering, dbscan, principal component analysis PCA, SVM, etc).
- Database creation and management (SQL)
- Data visualization (Tableau and PowerBI)
- Automatization and management of feature layers and Python notebooks on ESRI and Arcgis Online platform.
- Handling and use of other audio-visual tools (Adobe Photoshop, Adobe Illustrator, DaVinci resolve studio, Canvas, etc.)

### Experience:

#### **Cabildo Insular de La Palma, Digital Transformation Service** *Data scientist*

January 2024 - January 2025

- Data analysis in search of patterns and trends as well as data cleaning and preprocessing.
- Review, error reporting and improvement proposals in platforms and digital services of the administration.
- Creation of data visualizations, interactive dashboards and infographics.
- Preparation of reports and technical reports.
- Other administration tasks.

## **University of La Laguna, SEGAI** *Curricular internships*

September 2019 - May 2020

- Preparation of material samples and subsequent analysis by X-ray diffraction (SIDIX).
- Preparation of organic samples for electron microscopy analysis (Metallization).
- Visual analysis of samples by scanning and transmission electron microscopy (SEM and TEM).
- Preparation of reports and report of results of the tests performed.
- Writing, presentation and defense before a tribunal of the technical report on my work at SEGAI.
- Issuing invoices to research teams.

## **Docent** *Private teacher*

September 2016 - May 2019

- Elaboration of notes and explanation of the different theoretical concepts of mathematics, physics and chemistry subjects for secondary and high school students.
- Practical exercises and models explained step by step for a better understanding of the theory by the students.
- Correction of exercises and mock exams for students.
- I gave classes at home in person and also online.
- Support and resolution of student's doubts via email during evaluation periods.

## **Education:**

### **Universitat Oberta de Catalunya** *Master's degree*

September 2022 - January 2025

Master's degree in data science and big data.

### **Universidad de La Laguna** *Degree*

September 2013 - July 2021

University degree in physics.

## Formation:

### **Optimization of cybersecurity in the local public sphere. The National Security Scheme (SNS), FECAM *Webinar***

November 2024

Webinar endorsed by FECAM (Canary Islands Federation of Municipalities) on the management and optimization of cybersecurity measures according to the national security scheme (SNS) in public administration.

### **Data Governance: treatment and management of Data in Local Entities, FECAM *Webinar***

October 2024

Webinar endorsed by FECAM (Canary Islands Federation of Municipalities) on data management strategies in public administration.

### **Processing and obtaining products (SNAP) from Sentinel satellite data of the Copernicus program (ESA), ULPGC *Course***

June 2024

Online training on the fundamentals and applications of space remote sensing, the study of the SNAP tool for processing, visualization and analysis of SENTINEL-1 and SENTINEL-2 data.

### **Uses of AI in public administration, FECAM *Webinar***

June 2024

Webinar supported by FECAM (Canary Islands Federation of Municipalities) on the possible applications of artificial intelligence in public administration.

### **Cloud computing, Fuerteventura 2000 *Course***

June 2024

Introductory training in cloud computing concepts endorsed by the Hotel Escuela El Mirador.

### **Google Data Analytics, Coursera *Course***

February 2024

Training endorsed by Google and certified by Coursera that covers basic and intermediate concepts in the world of data analysis (the work of data scientists, the typical management and structure of projects and all the people involved, data manipulation and transformation, data visualization, some notions of the R programming language for statistical analysis, etc.).

## **Business intelligence and data mining, FEMXA** *Course*

March 2022

Training subsidized by the SCE (Canary Islands Employment Service) in the basic concepts of business intelligence and the application of the most common data mining techniques in the business world.

### **Other personal data:**

- I have a driving license and my own vehicle.
- Diligent and adaptable, I have always been able to prioritize the most urgent and / or complex tasks for better time management and preparation for possible unforeseen events.
- Time flexibility, in previous jobs not related to my field I have worked at night for more than a year.
- Availability for possible transfers.
- During high school I was part of various youth and cultural associations in the municipality of my town as a member of a dance group.
- Passionate about music and dance, in the past I took guitar lessons for more than a year, I belong to a percussion group (OLODRUM) and I also enjoy learning Latin dances at present.
- Secretary of the youth and cultural association ESVERLO EVENTS (event production).
- I enjoy and manage to disconnect and spend time in nature and practicing sports.