# Raúl Capellán Fernández

Data Scientist in









Phone: +34 699077706

Email: raulcape.7@gmail.com

# **太** Languages

English: Professional

Spanish: Native

### Technical Skills

Languages: Python, R, JavaScript, Node, SQL (PostareSQL)

Data cleaning: Scikit learn, Pandas, Numpy, tidyverse

Deep learning: Tensorflow, Keras, CUDA, LLM models

Cloud computing: HPC, AWS

GIS: Xarray, Qqis, GDAL,

GeoPandas

# Certifications

ML in Weather & Climate Copernicus ECMWF

Accelerated Computing, CUDA C Nvidia

**Building RAG Agents with LLMs** Nvidia

Machine Learning Stanford University / Coursera

Fundamentals of Deep Learning Nvidia

Spatial statistics and pattern detection ESRI España

## Profile

Data Scientist specialized in Artificial Intelligence (AI) with more than four years of experience in Deep Learning and Machine Learning techniques applied to Geographic Information Systems (GIS) using High Performance Computing (HPC) and cloud computing.

Proficient in software engineering principles and advanced statistical data analysis for the development of high-quality data-driven solutions. Committed to continuous learning and determined to tackle complex challenges to deliver trustworthy innovative AI technologies.

### Experience

### Research Engineer - Barcelona Supercomputing Center (BSC) 03-2024 to date (Barcelona)

Responsible in the Global Health Resilience research group for: developing of R packages to automate the transformation, cleaning, formatting and storage of GIS data, defining statistical models for predicting climate variability extreme events, parallelizing ML models, documenting methods and uses of software technologies, and visualizing and presenting data (climate and health data) for community and scientific use. Projects: Harmonize, IDalert, IDextremes.

### **Data Scientist - Vexiza**

03-2021 to 02-2024 (León)

As a senior developer, I led European projects (CDTIs) for public, private and military administrations focused on the design, implementation and deployment of GIS and AI tools for the detection and management of wildfires, climate events, traffic control and energy sector. The projects entailed processing and analyzing large volumes of data and required my coordination of medium-sized teams, resulting in the recognition of efficient execution and impactful outcomes.

### Front-End Web Developer - Xeridia

09-2020 to 02-2021 (León)

Front-End Developer primarily focused on financial projects and clients within the banking sector. Responsibilities included maintaining and optimizing databases, improving the performance of critical environments, developing integrated pipelines, documenting and updating code repositories, and creating dynamic applications using the Angular framework.



### Bachelor computer science

University of León - 2016 to 2021

#### Master artificial intelligence

International University of Valencia - 2021 to 2022