

# Position Offered: POSTDOCTORAL RESEARCHER

## Project: *Spatial Habitat Identification and Forecasting Tool (SHIFT)*

**Technological and scientific fields:** Artificial Intelligence, Massive Data and Information Processing Technologies, High-Performance Computing, Advanced Data Analytics/Edge Computing, Climate Change and Biodiversity, Digital Twins, Computational Biology, Data Analysis and Integration

**Location:** Barcelona, Cataluña, Institut de Ciències del Mar (<https://www.icm.csic.es/>)

**Research Group/PI:** iMARES, Francisco José Ramírez Benítez

### PROJECT SUMMARY

SHIFT aims to develop digital tools to evaluate marine biodiversity redistribution in response global environmental change. These tools include the acquisition and standardization of geospatial data and their integration into species distribution models and ecosystem models. SHIFT will provide hired personnel with valuable training in various digital competencies directly relevant to the project's development, ultimately enhancing their professional growth.

### PROFESSIONAL PROFILE

#### Minimum requirements:

The candidate should hold a PhD degree in Biodiversity or related fields. Solid background and quantitative skills in the handling and analysis of movement and geospatial datasets from multiple sources is required. Proficiency in the data acquisition (fieldwork and online repositories), management and data standardization and their integration in modelling approaches.

Strong programming skills in R programming language and experience in statistical analysis and modelling, data visualization capabilities.

Good communication and writing skills in English and Spanish.

#### Merits to be considered:

Experience in handling and analysis of big datasets.

Experience in the Open Science, FAIR data, use of GitHub repository.

Experience in relational databases (SQL).

Experience in machine learning and Species Distribution Models is beneficial.

### WHAT IS OFFERED

SHIFT will be developed within a multi-institutional and interdisciplinary framework that will ensure the successful achievement of its research objectives, as well as the training of the hired individual in a variety of digital competencies directly relevant to the project's development. The Training Plan includes a minimum of 240 ECTS, encompassing formal education and stays at other national and international research centers.

#### Contract conditions:

Indefinite contract for a Postdoctoral Researcher associated to the Momentum Project of 4 years' duration according to Spanish science law. Gross annual salary (41.000 € - 52.000 €).

**Start of contract: before 31 December 2024**

### PRINCIPAL INVESTIGATOR CONTACT

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