Position Offered: PREDOCTORAL RESEARCHER

Project: *PTI AGRIAMBIO. Development of relational software for the adaptive improvement of the socio-environmental effectiveness of the Common Agricultural Policy (CAP) in Spain.*

Technological and scientific fields: Digital tools for agriculture, livestock, aquaculture, etc. Massive data and information processing technologies. High performance computing.

Location: Madrid / Community of Madrid / Museum of Natural Sciences / https://pti-agriambio.csic.es

Research Group/PI: PTI AGRIAMBIO / Mario Díaz Esteban / www.pti-agriambio.csic.es

PROJECT SUMMARY

The project aims to a) develop the basic structure of the relational databases of environmental, social and agronomic indicators for the adaptive improvement of the socio-environmental effectiveness of the Common Agricultural Policy (CAP), in close collaboration with the Ministry of Agriculture, Fisheries and Food and other relevant entities (NGOs, research groups); b) build it under the supervision of PTI AGRIAMBIO researchers (for the adaptive improvement of the socio-environmental effectiveness of the Common Agricultural Policy (CAP); c) design measurement protocols for its routine application and d) carry out analysis of the results of the first years of application of the CAP in Spain. Both the protocols and the results of the analyzes will give rise to publications, both scientific and technical (reports, presentations, or patents).

PROFESSIONAL PROFILE

Minimum requirements:

- Degree in Agricultural Sciences, Environmental Sciences, Biology or Economics.
- Master's degree
- Fluency in English

Merits to be considered:

Experience in projects related to sustainable agriculture, management and conservation of natural resources and/or environmental socio-economics. Knowledge and handling relational databases. Familiarity with analysis of large volumes of data and ability to work in multi-disciplinary teams. Experience with Geographic Information Systems, especially ArcGIS.

WHAT IS OFFERED

Interdisciplinary training in advanced analysis techniques based on Artificial Intelligence, Machine Learning and Deep Learning.

Periodic stays at the Ministry of Agriculture, Fisheries and Food (MAPA) with the teams that will provide a large part of the raw data sets of interest for the thesis project (20-30 ECTS), short stays (5-10 ECTS) in other research groups and NGOs and in relevant European centers.

Courses in data management with SQL technologies, programming and analysis using programming with R and/or Python, management of spatio-temporal data and remote sensing images, and modelling with Machine and Deep Learning techniques specific to the agricultural field.

Contract conditions:

Predoctoral Researcher contract of 4 years' duration. Gross annual salary of 23,871.33 €.

Start of contract: before 31 December 2024

PRINCIPAL INVESTIGATOR CONTACT

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Financiado por la Unión Europea
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