

Position Offered: PREDOCTORAL RESEARCHER

Project: *Multi-scale integration of proximal and remote sensing data for the efficient implementation of artificial intelligence algorithms in environmental applications*

Technological and scientific fields: Remote sensing, multiscale integration, artificial intelligence

Location: Madrid, Comunidad de Madrid, Institute of Economics, Geography, and Demography

Research Group/PI: Environmental Remote Sensing and Spectroscopy Laboratory (SpecLab, <https://speclab.csic.es>) / Javier Pacheco-Labrador and M. Pilar Martín

PROJECT SUMMARY

The Ph.D. candidate will develop new approaches to integrate multi-scale proximal and remote sensing data that enable, improve, or optimize the application of artificial intelligence algorithms in the context of environmental applications and vegetation monitoring. The candidate will integrate into SpecLab, a reference laboratory in the context of proximal sensing and the acquisition and analysis of multi-scale spectral data, and will closely collaborate with members of the CSIC's interdisciplinary thematic network TELEDETECT (<https://pti-teledetect.csic.es>). The candidate will follow a tailored training program to acquire the scientific and technological skills necessary to achieve these aims, perform research stays in national and international laboratories, and develop open-source applications to facilitate the use and maximize the impact of his/her research.

PROFESSIONAL PROFILE

Minimum requirements:

The candidate should feature

- Bachelor or engineering degree in computing science or natural/environmental sciences
- M.Sc. in geographical information technologies, remote sensing, or similar
- Proficiency in written and spoken English
- Basic programming skills

Merits to be considered:

We will also value

- Research experience
- Publications
- Application development experience
- Knowledge on statistics, geostatistics, or database management

WHAT IS OFFERED

This position offers the candidate specialization in transversal topics to remote sensing: multiscale data integration, and artificial intelligence, which will maximize future opportunities in the academy and industry. The project will take place in a reference laboratory specialized in remote sensing and field and laboratory spectroradiometry, where the candidate will be able to diversify and enlarge his/her CV. The interactions with national networks and a research stay at an international research institute of excellence will provide an above-average number of scientific connections. The tailored research program (240 ECTS) will be reviewed and agreed upon with the supervisors to identify gaps and avoid unnecessary efforts where knowledge already exists. The results will be useful for the remote sensing community and the TELEDETECT network, which will maximize the impact and visibility of the candidate.

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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