





RESEARCH TECHNICIAN ON DATACUBES FOR THE OEMC AND AD4GD PROJECTS (ref. 23-023-29790)

CREAF is seeking a research technician for developing DATACUBES and related technologies including OpenEO, Digital twins and Data Spaces as the CREAF contributions to AD4GD project ("All Data 4 Green Deal - An Integrated, FAIR Approach for the Common European Data Space"), with ref. HORIZON-CL6-2021-GOVERNANCE-01-17-101061001 and OEMC (Open-Earth-Monitor - A cyberinfrastructure to accelerate uptake of environmental information and help build user communities at European and global levels) with ref. HORIZON-CL6-2021-101059548 projects, both from the Horizon Europe program and financed by the European Union or future projects in the same topics.

A part-time contract (30 hours/week, 80%) is offered, with a planned incorporation in May 2023 and will have a and will be a contract linked to the budget of the projects described above ("actividades cientifico-técnicas", according to the Law 14/2011) with an expected duration of 2 years, and the possibility of extension if the budget allows it. The salary offered is 21987,45€ gross per year.

TASKS

- Develop applications to process remote sensing data and produce higher level products in the cloud environments such as open data cube and openEO (e.g. using python and Jupyter Notebooks.
- Connect the MiraMon Map Browser (<u>https://github.com/grumets/MiraMonMapBrowser</u>) with datacubes and OpenEO and integration of the new requirements coming for Open-Earth-Monitor or strategic interests of the Grumets group.
- Contribute to the development of a FAIR architecture for the Open-Earth-Monitor project.
- Create written materials for the help and dissemination or the cited platforms.
- Apply relevant Open Geospatial Consortium (OGC) Standards to the implementations, such as the new Web APIs as well as the Sensor Things API.
- Maintain communication with the relevant project consortiums and monitor the project evolution.
- Write project deliverables.
- Write scientific literature or produce materials/data supporting the writing process.
- Contribute to the promotion of the Grumets research group and to the use of the MiraMon software (desktop, mobile and web).

REQUIREMENTS

- Bachelor's degree in Biology, Environmental Science, Ecology, Informatics, Physics or equivalent.
- GIS and Remote Sensing skills.
- Experience in developing applications in the Copernicus DIAS, Open Data Cube or similar.
- Some level of programming skills in at least one of the following languages: JavaScript, Python, R, C or similar.
- Experience in previous European Union or international research projects.
- Good level of English, written and spoken.





Funded by the European Union



ASSESSABLE CONDITIONS

- Master in Remote Sensing and GIS or similar.
- PhD in Environmental, Biological Sciences, Geography, Informatics, Physics or similar.
- Good level in the use of MiraMon, including the use of batch processing.
- Experience in post doctorate research and development work or supporting research and development.
- Fluency in exposing ideas and discussing in public.
- Deep knowledge in geospatial standards (sensors, metadata, data quality web services, APIs).
- Careful attention to details.
- Working independently but in constant coordination with a team.
- Good level of Catalan, written and spoken.
- Candidates who have a recognized disability and accredited equal to or greater than 33% will be prioritized, as long as the disability is compatible with the proper performance of the job.

SELECTION PROCESS AND CRITERIA

- 1. Admission of candidates: applicants must submit a:
 - A Curriculum Vitae (CV)
 - A cover letter (max. 2 pages)
 - The questionnaire attached to the offer (filled),
 - And provide a description and a link to a GitHub (or equivalent) of previous JavaScript/HTML language projects or developments with particular attention to the ones that are not based on external libraries but in actual algorithmic code done by you, as part of the content of the cover letter.

by e-mail to <u>laboral@creaf.uab.cat</u>, <u>until 23 April 2023</u>, <u>indicating the reference code</u> of the offer. Applications referred to another portal, other than CREAF job openings section and the instructions included in this, will not be accepted.

- 2. Pre-selection: determination of compliance with the minimum requirements of the offer.
- 3. Selection: assessment of the preselected candidates by scoring based on objective criteria.
- 4. A subset of candidates will be required to do a time-controlled programming exercise using GeoJSON with JavaScript in a web browser, if need to complete the selection.
- 5. Final decision: in case of finding the suitable person, the election will be formally communicated to him/her, and the identification of the chosen person will be published on CREAF job openings section.

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