326_22_ES_ESS_RE1

Job Reference

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Position

Python developer for climate diagnostics - Junior research engineer (RE1)

Data de tancament

Dilluns, 31 Octubre, 2022

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About BSC

The Barcelona Supercomputing Center - Centro Nacional de Supercomputación (BSC-CNS) is the leading supercomputing center in Spain. It houses MareNostrum, one of the most powerful supercomputers in Europe, and is a hosting member of the PRACE European distributed supercomputing infrastructure. The mission of BSC is to research, develop and manage information technologies in order to facilitate scientific progress. BSC combines HPC service provision and R&D into both computer and computational science (life, earth and engineering sciences) under one roof, and currently has over 770 staff from 55 countries.

Look at the BSC experience:

BSC-CNS YouTube Channel
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Context And Mission

Within the Earth Sciences Department of Barcelona Supercomputing Center, led by Prof Francisco Doblas-Reyes, the department aims to deliver novel, advanced and well-evaluated high-resolution global climate models, capable of simulating and predicting climate estimations with unprecedented fidelity. Within the Computational Earth Sciences group, the successful candidate will be part of the Data and Diagnostics Team compound by 15 members.

The activities of this team consist of developing diagnostics and visualization tools in python and R for the scientists to optimize their data analysis, develop web services and provide user support and develop and maintain the infrastructure needed for the work of the department and for external projects.
The successful applicant will join the team and participate in a new project, led by BSC, to develop a plan for comprehensive climate change information for Catalonia. In this project, one of the objectives will be to develop and optimize a data workflow to gather some regional climate data over the Mediterranean and compute some diagnostics using the python package ESMValTool (https://www.esmvaltool.org/), a community diagnostic and performance metrics tool for routine evaluation of climate data. Contributions to the department’s ESMValTool support will also be expected from the candidate.

**Key Duties**

- Develop and optimize the data download for CORDEX data.
- Interact with scientists to develop scientifically accurate and computationally efficient diagnostics to evaluate the data using ESMValTool.

**Requirements**

- **Education**
  - Having a Bachelor or Masters degree in Computer Science, Engineering, Physics or related discipline

- **Essential Knowledge and Professional Experience**
  - Experience with Python and numerical libraries (numpy, scipy,...)
  - Experience or knowledge in the usage and support of Linux-based systems

- **Additional Knowledge and Professional Experience**
  - Programming skills to manage big and collaborative projects and experience with git or SVN.
  - Knowledge of tools to manipulate climate data (netCDF, xArray/Iris) is not mandatory but will be valued

- **Competences**
  - This is a specialized position so the successful candidate is expected to have a demonstrated learning capacity and the motivation to maintain a learning progression during the contract.
  - The BSC Earth Sciences department is an international and interdisciplinary environment, so the candidate must be fluent in English and have good written and verbal skills.
  - The candidate will work for an international collaborative project, so it is mandatory to be able to fulfill schedules and coordinate with members from other institutions, as well as disseminate the advances in international workshops.
Conditions

- The position will be located at BSC within the Earth Sciences Department
- We offer a full-time contract, a good working environment, a highly stimulating environment with state-of-the-art infrastructure, flexible working hours, extensive training plan, tickets restaurant, private health insurance, fully support to the relocation procedures
- Duration: Open-ended contract due to technical and scientific activities linked to the project and budget duration
- Salary: we offer a competitive salary commensurate with the qualifications and experience of the candidate and according to the cost of living in Barcelona
- Starting date: 01/09/2022

Applications procedure and process

All applications must be made through BSC website and contain:

- A full CV in English including contact details
- A Cover Letter with a statement of interest in English, including two contacts for further references - Applications without this document will not be considered

In accordance with the OTM-R principles, a gender-balanced recruitment panel is formed for every vacancy at the beginning of the process. After reviewing the content of the applications, the panel will start the interviews, with at least one technical and one administrative interview. A profile questionnaire as well as a technical exercise may be required during the process.

The panel will make a final decision and all candidates who had contacts with them will receive a feedback with details on the acceptance or rejection of their profile.

At BSC we are seeking continuous improvement in our recruitment processes, for any suggestions or feedback/complaints about our Recruitment Processes, please contact recruitment [at] bsc [dot] es.

For more information follow this link

Deadline

The vacancy will remain open until suitable candidate has been hired. Applications will be regularly reviewed and potential candidates will be contacted.
OTM-R principles for selection processes

BSC-CNS is committed to the principles of the Code of Conduct for the Recruitment of Researchers of the European Commission and the Open, Transparent and Merit-based Recruitment principles (OTM-R). This is applied for any potential candidate in all our processes, for example by creating gender-balanced recruitment panels and recognizing career breaks etc.

BSC-CNS is an equal opportunity employer committed to diversity and inclusion. We are pleased to consider all qualified applicants for employment without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, age, disability or any other basis protected by applicable state or local law.

For more information follow this link

Barcelona Supercomputing Center - Centro Nacional de Supercomputación

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