392_21_ES_CES_RE2

Job Reference

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Position

Research Engineer for Development of Weather HPC Software (RE2)

Data de tancament

Dimarts, 16 Novembre, 2021

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Job title: Research Engineer for Development of Weather HPC Software (RE2)

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 700 staff from 49 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 (BSC), led by Prof Francisco Doblas-Reyes, the Computational Earth Sciences group is looking for a computer scientist to contribute to the development of new features in the land-use model (H-TESSEL) embedded in the IFS weather model, as well as to provide user support to the Climate Prediction group.

The candidate, in close collaboration with external (other European research institutes) and internal (Earth Sciences) climate scientists, will integrate into the full version of IFS improvements to H-TESSEL [made by external collaborators]. The candidate will develop, test and run simulations using ECMWF infrastructure (HPC, workflow and project management) to validate the developments. Some computational analysis to evaluate the performance of the model will also be required.
Key Duties

- The applicant will develop, test and validate, new solutions in the IFS land-use model (H-TESSEL).
- The applicant will provide technical support to climate and computer scientists from the Earth sciences department, working with the IFS model.

Requirements

- Education
  - A Bachelor’s degree in Computer Science, Telecommunications, Physics or related disciplines is required.

- Essential Knowledge and Professional Experience
  - Excellent computing skills in high-level computer languages (especially FORTRAN) and experience with UNIX/LINUX environments and scripting languages (e.g. bash, Python).
  - Excellent programming skills to manage collaborative projects and experience with git and SVN.

- Additional Knowledge and Professional Experience
  - Previous experience in a scientific area related to the position, in particular, climate or meteorological modelling.
  - Previous experience in HPC architecture and workflow managers.
  - Previous experience in parallelization of numerical codes (e.g. MPI, OpenMP...).
  - Computer programming experience related to solving scientific computing problems involving the handling of very large projects.

- Competences
  - Capacity to interact and build strong relations with both climate and computer scientists, including external partners from European research institutions.
  - Fluency in English.
  - Excellent written and verbal communication skills.
  - Ability to take initiative, prioritize and work under set deadlines and pressure.

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: Temporary - 1 year renewable
- 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: December 2021
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 of rejection of their profile.

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

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