597_23_ES_CVC_R0

Job Reference

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Position

Master Student - Analyse atmospheric circulation changes in constrained climate projections (R0)

Data de tancament

Dimarts, 16 Gener, 2024
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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, was a founding and hosting member of the former European HPC infrastructure PRACE (Partnership for Advanced Computing in Europe), and is now hosting entity for EuroHPC JU, the Joint Undertaking that leads large-scale investments and HPC provision in Europe. 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 900 staff from 55 countries.

Look at the BSC experience:
BSC-CNS YouTube Channel
Let’s stay connected with BSC Folks!

We are particularly interested for this role in the strengths and lived experiences of women and underrepresented groups to help us avoid perpetuating biases and oversights in science and IT research.

Context And Mission

We are offering a research internship over 4 months (with the possibility of a part-time contract). In the position the successful applicant will analyze multi-model climate projections for changes in atmospheric circulation patterns associated with midlatitude climate extremes. This position will be hosted by the Climate Variability and Change group within BSC’s Earth Science Department.

The successful candidate will conduct statistical analyses of the climate simulation data and transform these
into useful insights for climate risk assessments. This work will contribute to the European Commission Horizon Europe project EXPECT, an international project to develop integrated prediction and attribution of regional climate changes including extremes.

**Key Duties**

- Analyze climate projections from multiple CMIP6 climate models.
- Develop or modify available tools to analyse atmospheric circulation patterns, in particular quasi-stationary Rossby waves.
- Attribute changes in atmospheric circulation to internal climate drivers (e.g. regional ocean temperatures) or external climate forcing.

**Requirements**

- **Education**
  - Having a degree in Computer Science, Mathematics or Physics.

- **Essential Knowledge and Professional Experience**
  - Excellent coding skills in R, Python.
  - Experience with UNIX/LINUX environments and scripting languages (bash,...).

- **Additional Knowledge and Professional Experience**
  - Experience of version control in a distributed team, including SVN or Git will be valued.
  - Previous experience in a scientific area related to the research position, in particular climate or ocean modeling will be valued.
  - Previous experience in HPC architectures and parallel programming (multi-threaded applications) will be valued.
  - Fluency in English.

- **Competences**
  - Good written and verbal communication skills.
  - Ability to take initiatives prioritize tasks and work under set deadlines.

**Conditions**

- The position will be located at BSC within the Earth Sciences Department.
- We offer a part-time contract (20h/week), a good working environment, a highly stimulating environment with state-of-the-art infrastructure, flexible working hours, extensive training plan.
- **Duration:** Internship.
- **Holidays:** 23 paid vacation days plus 24th and 31st of December per our collective agreement.
- **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:** February.
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](https://www.bsc.es/ca/join-us/job-opportunities/59723escvcr0)

Deadline

The vacancy will remain open until a 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.

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Barcelona Supercomputing Center - Centro Nacional de Supercomputación

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