Job Reference

28_ES_CES_R2

Position

Artificial Intelligence Post-doctoral Researcher in Earth Sciences (R2)

Data de tancament

Diumenge, 31 Març, 2019

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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 500 staff from 44 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 Computational Earth Sciences group has an immediate opening for a creative and resourceful postdoc candidate with strong artificial intelligence and computational science skills willing to apply these methods to Earth Sciences. The successful candidate will develop novel computational approaches based on AI techniques, and apply them to Earth Sciences with the objective to open and consolidate a new research line inside the group.

The candidate will interact with climate and atmospheric scientists from the Earth Sciences department and with computer scientists from the High Performance Artificial Intelligence (HPAI) research group as part of
the Computer Science department. The Researcher will work in a highly sophisticated HPC environment, will have access to state-of-the-art systems and computational infrastructures, and will establish collaborations with experts in different areas both at the local and international levels.

The term of the appointment is one year, with the option to extend to a second year depending on the performance and funding availability.

**Key Duties**

- Apply AI techniques to Earth Sciences (climate and/or atmospheric composition).
- Start a research line inside the Computational Earth Sciences team gathering all AI developments inside Earth Sciences department.

**Requirements**

- **Education**
  - PhD in computer science, telecommunications, mathematics or a related discipline

- **Essential Knowledge and Professional Experience**
  - Understanding and knowledge of AI techniques

- **Additional Knowledge and Professional Experience**
  - A first demonstrated experience in application and development of AI methods
  - Experience in packages such as Keras and TensorFlow and related packages
  - Previous experience in HPC architecture and parallel programming, including GPU (highly valued)
  - Good programming skills to manage big and collaborative projects and experience with git
  - Experience and knowledge in Earth Sciences, Numerical Methods or Computational Dynamic Fluids will be highly valued

- **Competences**
  - Capacity to interact and build strong relations with both climate, atmospheric and computer scientists
  - Excellent written and verbal communication skills
  - Ability to take initiatives, prioritize the tasks and work under set deadlines
  - Ability to work both independently and within a team
  - Fluency in English, both speaking and writing
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 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: asap

Applications Procedure

All applications must include:

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

Deadline

The vacancy will remain open until suitable candidate has been hired. Applications will be regularly reviewed and potential candidates will be contacted.

Diversity and Equal Opportunity Employment

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.

Barcelona Supercomputing Center - Centro Nacional de Supercomputación