107_CASE_FN_R2

Job Reference

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Position

Researcher (R2)

Data de tancament

Dilluns, 30 Juliol, 2018

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
BSC-CNS Corporate Video
Let's stay connected with BSC Folks!

Context And Mission

The Computer Applications in Science and Engineering (CASE) department is looking for a Researcher with a PhD degree in Physics to join the BSC Fusion group (fusion.bsc.es). The overall objective of our group is to enhance the modelling capabilities in fusion by code development, validation, integration and optimization including the use of advanced HPC techniques. We work closely towards the objectives of EUROfusion (www.euro-fusion.org), the European fusion research programme for Horizon 2020, in collaboration with ITER, International Tokamak Physics Activity, and the Spanish national fusion laboratory CIEMAT. The position supports the developments in our group and involves different state-of-the-art technologies. The successful candidate takes the responsibility of R&D related to the Alya System in our group, being its driving force within the group and the main contact point in the related collaborations with the CASE department and outside BSC in close liaison with the group manager. The Alya System is the BSC simulation code for multi-physics problems, specifically designed to run efficiently in supercomputers, c.f. https://www.bsc.es/research-and-development/software-and-apps/software-list/alya.
Key Duties

1. Lead the development of Alya applications for fusion
2. Contribute to the development of new project proposals involving Alya applications in fusion

Requirements

- **Education**
  - PhD in Physics
- **Essential Knowledge and Professional Experience**
  - At least 4 years of postdoctoral experience relevant to the position, preferably including experience in industrial sector
  - Experience in multi-physics modelling in plasma physics and/or fusion and in related software
  - Strong skills in Linux environment.
- **Additional Knowledge and Professional Experience**
  - Experience in numerical methods
  - Understanding of the agenda of industry and other related employment sectors in the field
  - Understanding the value of research work in the context of products and services
  - Ability to communicate with the wider community, and with society generally, about their areas of expertise
  - Ability to promote, within professional contexts, technological advancement
  - Experience in mentoring junior researchers, helping them to be more effective and successful in their R&D trajectory
- **Competences**
  - Flexible team player capable of working with others and also independently
  - Problem-solving, pro-active, result-oriented work attitude
  - Fluent English, both written and spoken
  - Good interpersonal skills, including in multi-cultural environments
  - Experience in liaising with different stakeholders in code development teams

Conditions

- The position will be located at BSC within the CASE 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
- 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: as soon as possible

Applications Procedure

All applications must include:

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