135_22_CS_CAOS_R2

Job Reference

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Position

Computer Architecture and/or Operating System postdoc (R2)

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
Let's stay connected with BSC Folks!

Context And Mission

The Computer Architecture and Operating System group at the Barcelona Supercomputing Center aims at carrying out research on programming models for critical embedded systems in charge of controlling fundamental parts of cars, airplanes and satellites. Our work is mainly done in the context of bilateral projects with several processor companies as well as several European-funded projects. For a complete list of publications of the group in the last years, please visit: www.bsc.es/caos

The objective of this position is to work in the context of several European Projects on high-performance platforms and AI-based frameworks as part of a young and dynamic team researching on computer architecture (processors and accelerators), operating system support, and AI frameworks. The postdoc is
expected to have conducted his/her PhD on related topics. Postdoc experience is welcome but not mandatory. The postdoc will join a team of several people helping him/her to familiarize with the needed tools and developments for a smooth ramp up process. This position offers the possibility to collaborate with research institutions and industry from several European locations, thus offering enriching experiences and opportunities to learn.

**Key Duties**

- Work with commercial platforms based on Arm, NVIDIA, Intel, and other computer units
- Work with performance simulators.
- Work with AI-based frameworks.
- Co-lead Master and PhD students.
- Learn and participate in the multiple ongoing projects in the group.
- Coordinate with a local team at BSC, and interact with European project partners

**Requirements**

- **Education**
  - PhD in Computer Architecture, Computer Sciences, Computer Systems, Telecommunications or Automation (or other related areas)

- **Essential Knowledge and Professional Experience**
  - Practical experience on performance analysis with simulators or real-platforms.
  - Familiarity with basics on processor architecture, either as part of his/her studies or work experience

- **Additional Knowledge and Professional Experience**
  - Knowledge on operating systems, AI, and use of commercial platforms based on Arm, NVIDIA, Infineon, etc. are welcome.
  - Experience with FPGA (user-level) is also welcome

- **Competences**
  - Problem-solving, pro-active, result-oriented work attitude
  - Good communication skills including a good command of the English language (written and spoken)

**Conditions**

- The position will be located at BSC within the Computer 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: asap
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