123_CS_WDC_RE2

Job Reference

123_CS_WDC_RE2

Position

Junior developer for BSC-LENOVO project

Data de tancament

Dimecres, 28 Febrer, 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

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Context and Mission
In the context of an internal BSC-LENOVO project, we are developing and evaluating a runtime library that will monitor parallel applications (MPI+OpenMP) using standard monitoring libraries such as PAPI to apply performance models and select the optimal operation point based on user specified policies. This library must cooperate with the scheduler in order to offer a holistic solution. The library operates at a low level context, accessing hardware counters, dealing with CPU frequencies, communicating with the resource manager, etc. The candidate will participate in the design of the software and will take the responsibility to implement and evaluate parts of it guided by the project leader and in cooperation with the rest of the team.

**Key Duties**

- Development and evaluation of specific components for the runtime library
- Participate in the internal project meetings
- Participate in publications resulting of the project and attendance to project meetings or demonstrations if required

**Requirements**

- **Education**
  - Bachelor degree in Computer Science or related degree

- **Knowledge and Professional Experience**
  - Software computing skills. Experience on programming languages (specially C/C++), and development tools such as Makefiles or autotools
  - Experience in software development in UNIX/LINUX environments is required
  - Skills on parallel programming
  - Experience on MPI, OpenMP and OmpSs programming models will be valued

- **Competences**
  - Candidates must be proactive, self-motivated individuals who can understand technical concepts
  - Excellent written and verbal communication skills in English
  - Ability to take initiatives, prioritize the tasks and work under set deadlines
  - Capacity to interact and build strong relations with a diverse members/stakeholder/staff base
  - Ability to work both independently and within a team

**Conditions**

- The position will be located at BSC within the Computer Sciences Department
- We offer a full-time contract, a good working environment, flexible hours, Tickets Restaurant and a medical assurance
- Duration of the contract: 1 year with possibility of extension depending on availability of funds and performance
- Starting date: asap
Applications Procedure

All applications must include:

- A motivation letter
- A full CV including contact details

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.