191_CASE_HPCSE_RE3

Job Reference

191_CASE_HPCSE_RE3

Position

Research Senior Engineer - RE3

Data de tancament

Diumenge, 24 Desembre, 2017

BSC-CNS (Barcelona Supercomputing Center – Centro Nacional de Supercomputación) is the National Supercomputing Facility in Spain and manages MareNostrum, one of the most powerful supercomputers in Europe. The mission of BSC-CNS is to investigate, develop and manage information technology in order to facilitate scientific progress. With this aim, special dedication has been taken to areas such as Computer Sciences, Life Sciences, Earth Sciences and Computational Applications in Science and Engineering.

Look at the BSC experience:

BSC-CNS YouTube Channel

BSC-CNS Corporate Video

Let's stay connected with BSC Folks!

Context and Mission of the role

The Geophysical Group of the Computer Applications in Science and Engineering (CASE) Department at the Barcelona Supercomputing Center is offering a software engineer position to work on an interdisciplinary project on leading edge geophysical imaging tools for HPC environments. The candidate should work in close cooperation with other people already working in the subject. The contract will be temporary.

Responsibilities

- To implement geophysical HPC tools using state-of-the-art programming models and distributed paradigms.
- Code optimization of previous and new developments
- To produce highly-adapted code for current HPC architectures considering both, intra- and extra-node parallelism.
Requirements

- **Education**
  1. Degree in Informatics or Engineering

- **Knowledge and professional experience**
  1. Linux/UNIX OS, Shell scripting and command line
  2. Experience with C programming language.
  3. Experience with Fortran, C++ and python programming languages are preferable.
  4. Knowledge, to some extent, about some or all the following programming models:
     1. MPI (must have)
     2. OpenMP (must have)
     3. CUDA (must have)
     4. OpenCL
     5. OpenAcc
  5. Experience with HPC environments both, as user and software developer are preferable for architectures such as:
     1. Intel's General Purpose Processors (e.g. Xeon)
     2. GPUs (NVIDIA preferred)
     3. Intel's Xeon Phi

Competences

- Have a great ability for team work
- Have a natural proactive character
- Fluent English both, written and spoken

In order to be successful in this role the candidate should have:

Conditions

- A competitive salary will be provided, matched to the cost of living in Barcelona, depending on the value of the candidate

Applications Procedure

All applications must be done through the BSC website:

http://www.bsc.es/about-bsc/employment/vacancies

Including:

1. 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.

Barcelona Supercomputing Center - Centro Nacional de Supercomputación