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Scientific Computing Specialist

Job Description

PIC is looking for a senior scientific computing specialist to manage the center's high throughput data processing services and to provide expert technological support to researchers of different disciplines. Technical aspects of the position include data management, systems administration, software engineering and cloud computing. Scientific aspects include ability to work within a research team and analyze their data and computing needs.

The successful candidate is expected to be able to prioritize work in order to meet deadlines and work with minimal supervision in a goal-oriented environment. Due to PIC's participation in multiple international collaborations, advanced oral and writing English knowledge are required.

Duties

- Support researchers of different disciplines and work with them to design and implement scientific computing solutions to meet their data analysis needs effectively.
- Manage the current PIC scientific computing services, including a 10.000 CPU cores HTCondor cluster and a 12 node Hadoop cluster. Installation, configuration, daily maintenance and tuning of the services to ensure they fulfil the users' needs.
- Collaborate with international partners to develop and integrate new scientific computing solutions. Test their performance, scalability and cost effectiveness. Assess their fit within PIC's strategy.

Degree and area of specialization

PhD in Physics, Chemistry, Biology or another scientific discipline.

Professional Experience, knowledge and competences

- 5 years of experience in Linux system administration.
- 5 years of experience operating scientific computing services at large scale.
- Support to researchers of different disciplines.
- Participation in international research projects.
- Monitoring and automation tools such as puppet, grafana, icinga, etc.
- Excellent teamwork and communication skills.
- Independent planning and organization.

Campus UAB Edifici D - 08193 Bellaterra - Barcelona – Spain - Tel +34 93 581 41 09 - <http://www.pic.es>

Institut de Física
d'Altes Energies



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- Flexibility and proactive attitude.
- Advanced level in written and spoken English.

Positively valued

- Participation in competitive research projects as Principal Investigator.
- Knowledge of Kubernetes, Docker and Singularity.
- Cloud computing platforms administration.
- Knowledge of Grid technologies, in particular the ones used in the Worldwide LHC Computing Grid.

Applications

Applicants must be nationals of the European Union, or of countries in the European Economic Area or Switzerland, or have a valid Spanish work permit. All documentation will be handled electronically and exclusively in pdf format. Applications should be sent to pic.jobs@pic.es indicating reference number PIC2021-IFAE-1 attaching a Curriculum Vitae and any other relevant documentation. The selection process will be continuous until a qualified candidate is found. Ideally, the successful candidate would start working at PIC no later than July 2021.

Contract characteristics

The recruiting center will be the Institut de Física d'Altes Energies (IFAE). The contract is funded by PIC Base Budget including a 6 month trial period. It includes the standard social benefits in Spain, which include public Health. The place of work will be the headquarters of PIC at Universitat Autònoma de Barcelona.

Salary Range: between 33.000 and 40.000 € yearly gross, depending on experience.

IFAE is an equal opportunity employer committed to diversity in the workplace. We welcome applications from all qualified candidates. Women are particularly encouraged to apply.

PIC provides a flexible work environment, and promotes proactive goal-oriented approach in the workplace.

About PIC

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PIC is a scientific-technological center located in the UAB University campus near Barcelona and it is maintained through a collaboration agreement between the research centers IFAE (<http://www.ifae.es>) and CIEMAT (<http://www.ciemat.es>).

PIC uses distributed high throughput computing technologies including clusters, Grid, Cloud and Big Data, to support the scientific mission of various international collaborations in the field of particle physics, astrophysics and cosmology doing data-intensive research.

Providing data processing capacity at the level of 8000 cpu cores, 10 Petabytes of disk and 25 Petabytes of tape, PIC is a world-wide recognized center for scientific data processing and High Throughput Computing. It is the main computing center in Spain for the CERN LHC particle accelerator, a Science Data Center for the ESA Euclid satellite mission and the main data repository for the MAGIC and PAU astrophysics experiments.

Bellaterra, May 11, 2021

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