444_24_LS_CB_R0

Job Reference

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Position

Master Student - Computational Biology Group (R0)

Data de tancament

Dissabte, 31 Agost, 2024
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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, was a founding and hosting member of the former European HPC infrastructure PRACE (Partnership for Advanced Computing in Europe), and is now hosting entity for EuroHPC JU, the Joint Undertaking that leads large-scale investments and HPC provision in Europe. 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 1000 staff from 60 countries.

Look at the BSC experience:
BSC-CNS YouTube Channel
Let's stay connected with BSC Folks!

We are particularly interested for this role in the strengths and lived experiences of women and underrepresented groups to help us avoid perpetuating biases and oversights in science and IT research. In instances of equal merit, the incorporation of the under-represented sex will be favoured.

We promote Equity, Diversity and Inclusion, fostering an environment where each and every one of us is appreciated for who we are, regardless of our differences.

If you consider that you do not meet all the requirements, we encourage you to continue applying for the job offer. We value diversity of experiences and skills, and you could bring unique perspectives to our team.

Context And Mission

The Computational Biology group, led by ICREA professor Alfonso Valencia, is looking for a Master's student to work on the link between local frustration and conformational diversity within protein ensembles. The student will contribute to adapt the computational algorithms behind FrustraEvo, which calculates conserved local frustration patterns in proteins within the same family to develop a new tool, FrustraEnsemble, to calculate and cluster the conformational space of a given protein based on local frustration, exploring the connections between local frustration and the ability of a protein to explore its conformational space.

The successful candidate will join a dynamic research group within the Life Sciences department, which integrates independent senior scientists who work on various aspects of computational biology, ranging from bioinformatics for genomics and proteomics to computational biochemistry and text mining. The Researcher will work in a highly sophisticated HPC environment, have access to systems and computational infrastructures, and establish collaborations with experts in different areas.

Key Duties

- Develop a master thesis in the area of frustration and conformational ensembles
- Participate in internal group meetings and other scientific discussions

Requirements

- Education
  - Degree in Bioinformatics, Biotechnology or any field related to biomedicine

- Essential Knowledge and Professional Experience
  - Knowledge of UNIX/Linux environments
  - Knowledge of bioinformatics/protein folding
  - Experience in high-performance computing
  - Knowledge or experience in Machine Learning
  - Experience with some of the following: Scripting languages: Perl, Python, Bash, R

- Additional Knowledge and Professional Experience
  - Fluency in spoken and written English

- Competences
  - Good communication skills

Conditions

- The position will be located at BSC within the Life Sciences Department
- We offer a part-time or full-time contract (37.5h/week), a good working environment, a highly stimulating environment with state-of-the-art infrastructure, flexible working hours, extensive training plan, support to the relocation procedures
- Duration: linked to the internship agreement with the university
- Holidays: 23 paid vacation days plus 24th and 31st of December per our collective agreement
- 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: 01/09/2024

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 a 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