

[194_19_LS_ICB_R1](#)

Job Reference

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Position

PhD student in Computer Science and Bioinformatics (R1)

Data de tancament

Dijous, 31 Octubre, 2019

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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 600 staff from 49 countries.

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Context And Mission

Professor Nataša Pržulj is looking for several PhD students to work in machine learning and network science. They will be developing new algorithms for computationally hard problems and applying them to analyzing large-scale molecular and patient data to aid drug discovery and personalizing treatment. The successful candidates will work on the prestigious ERC Consolidator grant of Prof. Pržulj.

The successful candidates will complete a PhD in Computer Science, which will address developing and applying sophisticated machine learning and network science models and algorithms. The algorithms will be carefully tuned to extract relevant biological and medical knowledge from systems-level real-world molecular and medical data. The aim is to utilize them to understand the structure of the data that would enable mining the data for new biological and medical insight that would further lead to improving diagnostics, discovering new biomarkers, improving patient stratification and treatment, personalizing

treatment and facilitate rational drug development. The successful candidates will join a dynamic research group of Prof. Przulj within BSC. The students will work in a highly sophisticated HPC environment, will have access to systems and computational infrastructures, and will establish collaborations with experts in different areas.

Key Duties

- Complete a PhD in computational biology
- Collaborate with various research groups across Europe and elsewhere

Requirements

- Education
 - MSc in Computer Science, Mathematics, Physics, Bioinformatics, or a related field
 - BSc in Computer Science is preferred
- Essential Knowledge and Professional Experience
 - Fluency in spoken and written English
- Competences
 - Good technical skills including at least some of the following: algorithms, data analysis, graph, network and complexity theory, scientific computing, statistics, machine learning, programming in C, C++, a scripting language and Matlab, using a parallel computing environment, bioinformatics, network biology, network medicine, network analytics, medical informatics

Conditions

- The position will be located at BSC within the Life 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: Temporary - 1 year renewable
- 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: 1/10/2019

Applications Procedure

All applications must include:

1. A full CV including contact details.
2. Academic transcripts from all Undergraduate and MSc degrees.
3. Three letters of recommendation. The references should send their letters to recruitment [at] bsc [dot] es before the deadline.
4. A statement of motivation and research interests.

Deadline

The vacancy will remain open until suitable candidate has been hired. Applications will be regularly reviewed and potential candidates will be contacted.

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

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