192_25_CASE_DPPP_RE1

Job Reference

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Position

Research Engineer - geolocalized mobility data for digital twin (RE1)

Fecha de cierre

Jueves, 27 Marzo, 2025
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Job title: Research Engineer - geolocalized mobility data for digital twin (RE1)

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 Data Analytics and Visualization Group is involved in a project to develop digital twins for cities. This platform will provide policy makers with a holistic view of the city, allowing them to make informed decisions that will improve the quality of life for citizens, and build more sustainable cities. Citizens will also be able to access the platform to understand and participate in the decisions that affect their lives.

The selected candidate will focus on the design and development of interactive infographics in spatial analysis platforms.

Key Duties

- Design and development of interactive maps by using web mapping services
- Spatial data analysis
- Assistance in the user experience and UX design process
- Document the data and the results
- Collaborate with internal and external researchers of the project

Requirements

- Education
  - Bachelor or Master related to Smart cities and sustainable cities

- Essential Knowledge and Professional Experience
  - Experience in gathering datasets from spatial data portals
  - Knowledge and professional experience in Geographical Information Systems (GIS), and GIS software (QGIS)

- Additional Knowledge and Professional Experience
  - Knowledge with programming languages such as Python, R
  - GIS python packages like ArcPy, PyQGIS
  - Experience with GIS software ArcGIS

- Competences
  - Good written and verbal communication skills
  - Ability to work both independently and within a team.

Conditions

- The position will be located at BSC within the CASE Department
- We offer a 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, restaurant tickets, private health insurance, support to the relocation procedures
- Duration: Open-ended contract due to technical and scientific activities linked to the project and budget duration
- 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: As soon as possible

Applications procedure and process

All applications must be submitted via the BSC website and contain:

- A full CV in English including contact details
- A cover/motivation letter with a statement of interest in English, clearly specifying for which specific area and topics the applicant wishes to be considered. Additionally, two references for further contacts must be included. Applications without this document will not be considered.

Development of the recruitment process

The selection will be carried out through a competitive examination system ("Concurso-Oposición"). The recruitment process consists of two phases:

- **Curriculum Analysis:** Evaluation of previous experience and/or scientific history, degree, training, and other professional information relevant to the position. - *40 points*
- **Interview phase:** The highest-rated candidates at the curriculum level will be invited to the interview phase, conducted by the corresponding department and Human Resources. In this phase, technical competencies, knowledge, skills, and professional experience related to the position, as well as the required personal competencies, will be evaluated. - *60 points. A minimum of 30 points out of 60 must be obtained to be eligible for the position.*

The recruitment panel will be composed of at least three people, ensuring at least 25% representation of women.

In accordance with OTM-R principles, a gender-balanced recruitment panel is formed for each vacancy at the beginning of the process. After reviewing the content of the applications, the panel will begin the interviews, with at least one technical and one administrative interview. At a minimum, a personality questionnaire as well as a technical exercise will be conducted during the process.

The panel will make a final decision, and all individuals who participated in the interview phase will receive feedback with details on the acceptance or rejection of their profile.

At BSC, we seek continuous improvement in our recruitment processes. For any suggestions or comments/complaints about our recruitment processes, please contact