7_25_ES_GHR_RE2

Job Reference

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Position

Frontend developer for climate and health visual applications (RE2)

Data de tancament

Dimecres, 26 Març, 2025
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Job title: Frontend developer for climate and health visual applications (RE2)

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

Within the Earth Sciences Department of Barcelona Supercomputing Center (BSC), led by Prof Francisco Doblas-Reyes, the Computational Earth Sciences group is looking for a Python and Web developer to join the Data and Diagnostic Team and contribute to the development and maintenance of front-end (interactive dashboards, etc ...) and back-end (epidemiological models, etc ...) applications for climate and health services in collaboration with the Global Health Resilience group, led by ICREA Professor Rachel Lowe.The mission of the GHR group is to apply a transdisciplinary approach to co-designing policy-relevant methodological solutions, to enhance surveillance, preparedness and response to climate-sensitive disease outbreaks and emergence.
Mentioned applications (front-end and back-end) will be developed both in Python and R. The whole pipeline also includes a back-end part of data collection (download and formatting) and processing, using tools developed in-house. All tools will be working within an High Performance Computing environment.

We need a proactive candidate with good programming skills to join our development team, contribute to maintenance and user support of current services and improve both back-end and front-end of the applications for future releases.

Key Duties

- Design and develop software packages using Agile methodologies
- Contribute to user support and bug fixing
- Help to maintain current services
- Contribute to the documentation
- Contribute to the development of training materials for capacity strengthening workshop
- Liaise between internal and external groups across multiple research sites in-country and internationally

Requirements

- Education
    - Bachelor in Computer Science, Telecommunications or related discipline
    - Having a Master's degree will be valued

- Essential Knowledge and Professional Experience
    - Excellent development skills in Python and/or R
    - Excellent web programming skills: Javascript, CSS, etc.
    - Experience with mobile App development
    - Experience with UNIX/LINUX environments and scripting languages (bash, …)
    - Experience in using Web debuggers

- Additional Knowledge and Professional Experience
    - Experience of version control in a distributed team like Git will be valued
    - Previous knowledge of the development and execution of scientific applications on parallel computers will be valued
    - Previous knowledge of interactive frameworks will be valued
    - Notions of UI/UX will be valued

- Competences
  - Excellent problem-solving skills with a proactive approach
  - Willingness and capacity to learn about new technologies and procedures
  - Capacity to work and communicate in an international and interdisciplinary working environment
  - Excellent written and verbal communication skills
  - Ability to take initiative, prioritise and work under set deadlines and under pressure
  - Ability to work both independently and within a team
  - Fluency in English

Conditions

- The position will be located at BSC within the Earth Sciences 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: ASAP

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 recruitment [at] bsc [dot] es. For more information, please 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