904_24_LS_NLP_RE1

Job Reference

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Position

Data science and AI expert on NLP (RE1)

Fecha de cierre

Martes, 31 Diciembre, 2024
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Job title: Data science and AI expert on NLP (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 Natural Language Processing for Biomedical Information Analysis (NLP4BIA) group at BSC is an internationally renowned research group working on the development of NLP, language technology, and text mining solutions applied primarily to biomedical and clinical data. It is a highly interdisciplinary team, funded through competitive European and National projects requiring the implementation of natural language processing and advanced AI solutions making use of diverse technologies, including Transformers and recent advances in Large Language Models (LLM) to improve healthcare data analysis.
The NLP4BIA-BSC is looking for a Research Engineer with experience in Language Technologies and Deep Learning. The candidate will be involved in technical work related to international projects, being part of a team of researchers working on topics related to clinical Language Models, multilingual NLP, benchmarking of language technology solutions and predictive content mining. The candidate will have the opportunity to advance the state of the art of biomedical language models and NLP methods working in a multidisciplinary environment alongside AI experts, computational linguists, clinical experts, and other engineers.

Key Duties

- Predictive NLP model development: Development of advance content mining predictive solutions including clinical NLP, automatic text classification
- Pre-training of medical language models for healthcare application scenarios and tasks.
- Technical project coordination: Coordinate technical contributions inside the team and with clinical hospital site project collaborators.
- Implementation and deployment of clinical NLP solutions: Collaborate in the implementation and technical deployment of NLP platform prototypes at clinical sites.
- Documentation and Reporting: Contribute to technical reports and project documentation

Requirements

- Education
    - University degree in Computer Science, Computational Linguistic, or engineering discipline. Candidates with a minimum of a master's degree will be considered.

- Essential Knowledge and Professional Experience
    - Demonstrated experience in Natural Language Processing technologies
    - Experience in developing and training models using transformer architectures.
    - Practical experience with deep learning libraries (e.g. Pytorch, TensorFlow, Spacy, Transformers…)
    - Knowledge of deep learning methods for pre-training large language models using transformer architectures (like BERT, RoBERTA, DeBERTA, GPT, Bloom) as well as learning to implement LLMs.
    - Advanced programming skills in Python.
    - Experience in software development resources (Git)

- Additional Knowledge and Professional Experience
    - Strong technical writing skills.
    - Basic knowledge of Spanish.

- Competences

- Excellent communication and presentation skills.
- We are looking for someone who enjoys working in a wide range of areas and adapts quickly to new situations.
- A proactive mindset, with creativity to design new solutions.
- Ability to work effectively both autonomously and as part of an interdisciplinary team.
- Comfortable working under pressure and meeting strict deadlines.
- Proactive working style.

Conditions

- The position will be located at BSC within the Life 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 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

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