



Open Researcher Position (Application deadline January 10th, 2021)

MEDAL (Medical Data Analytics Laboratory) is a leading laboratory in Centro de Tecnología Biomédica (CTB) at Universidad Politécnica de Madrid focused on the application of computational techniques to several areas and fields, including data analytics, image processing and analysis and natural language processing.

The laboratory is looking for a candidate with excellent skills in different aspects related with the areas carried by the group. The laboratory is currently holding a set of European and Spanish projects mainly applied to biomedical domain.

We are opening a temporary position within the scope of some European (H2020) projects to lead a multidisciplinary cluster focused on the improvement of a NLP pipeline for the extraction of clinical information from Electronic Health Records in UPM Madrid (Campus de Montegancedo), Spain.

The position is for ~2 years (ends January 2023), with a gross salary of around 30.000 (year. The position is open to PostDocs with demonstrable experience in the field and a proactive attitude.

The topic of the position is:

"Natural Language Processing applied to Electronic Health Records: from raw data to patient-centered databases"

We are seeking for people holding a master in the areas of Computer Science, Telecommunications, Health Sciences, Clinical Research, Health Services Research, and pertaining areas, with proven experience in Natural Language Processing applied to different domains, specially, medical-clinical one. Very wellknown knowledge about the last techniques that are applied in the state of the art in the context of NLP and more specifically to the clinical domain is essential. Expertise in Machine Learning (ML) will be also of a high value to join this position where the application of existing algorithms is aimed to improve the pipeline to be constructed.

The candidate will join to our laboratory at Centro de Tecnología Biomédica and will lead the revolutionary change that we are aiming for our existing NLP





pipeline. By basing its work on our existing technologies, we are looking for a candidate with the passion and vision required to completely change our technical solution into a more flexible and accurate solution.

The selected candidate will work directly with the research line coordinator and other researchers who are already working on the project, but will take the leadership of the technical decisions in the context of the pipeline development and will have a team of 2-3 people to work with him.

The main requirements for the candidate are:

- Very strong knowledge and expertise of Natural Language Processing. Specially, about the last advances in the clinical domain for different NLP tasks (name entity recognition; temporal relation extraction; concept relations; etc.).
- Proactive attitude towards the work to be done.
- Strong supervision skills.
- Strong knowledge about machine learning.
- Strong knowledge about evaluation and validation.

Administrative and group enrolment tasks:

- Proactivity in the participation of the different projects carried out by the group.
- Help in the administration and technical support of the projects: proposal writing, project meetings, etc.
- Mentoring of graduate students working in the lab (when applicable).

Other skills:

- Capability to work on multicultural, multilanguage work teams.
- English speaker
- Ability to communicate research results (orally and written)
- Ethic code (especially important due to the nature of the data).

Applicants should send a vita together with a motivation letter to Prof. Alejandro Rodríguez González. Accompanying reference letters will be positively evaluated.

Email: alejandro.rg@upm.es