

CALL FOR GRANT APPLICATIONS (AE2023-0214)

INESC TEC is now accepting grant applications to award 1 Research Grant (BI) within the scope of the HfPT funded by IAPMEI with reference 41 Co-financed by Component 5 - Capitalization and Business Innovation, integrated in the Resilience Dimension of the Recovery and Resilience Plan within the scope of the Recovery and Resilience Mechanism (MRR) of the European Union (EU), framed in the Next Generation EU, for the period 2021 - 2026.

1. GRANT DESCRIPTION

Type of grant: Research Grant (BI)

General scientific area: COMPUTER SCIENCE

Scientific subarea: Programming, Informatics, Computer Systems

Grant duration: 12 months, starting on 2023-10-01, with the possibility of being renewed until the end of the project.

Scientific advisor: Alípio Jorge

Workplace: INESC TEC, Porto, Portugal

Maintenance stipend: € 1199,64, according to the table of monthly maintenance stipend for FCT grants , paid via bank transfer. Grant holders may be awarded potential supplements, according to a quarterly evaluation process (Articles 19, 21 and 22 of the Regulations for Grants of INESC TEC and Annex II), up to a maximum limit of 50% of the monthly maintenance stipend.

INESC TEC supports costs with registration, enrolment or tuition fees, during the grant duration, under the terms established in the internal document: "Payment of Tuition fees to grant holders".

The grant holder will benefit from health insurance, supported by INESC TEC.

2. OBJECTIVES:

Develop methods and algorithms for extracting narrative elements from clinical data and linking them to external sources and ontologies.

3. BRIEF PRESENTATION OF THE WORK PROGRAMME AND TRAINING:

This PhD project is aligned with our research on narrative extraction from text in different languages, with a greater focus in Portuguese. The domain of application is health, namely clinical health records and scientific databases. External sources of information and knowledge are used to guide the extraction process (e.g. ontologies that define the typical narratives of the domain) and to provide a semantic ground for the extracted elements (e.g. UMLS ontology). The student will be immersed in a team working in NLP and information retrieval.

The results of this project will be an ontology guided clinical narrative extraction process, including the processes for extraction and entity linking. The output of the process is a formal representation of the clinical narrative and its links to outside sources. We use current NLP approaches such as language models, not excluding more traditional information extraction approaches.

T +351 222 094 000 F +351 222 094 050 info@inesctec.pt www.inesctec.pt



4. REQUIRED PROFILE:

Admission requirements:

MSc in Computer Science or related areas.

The awarding of the fellowship is dependent on the applicants' enrolment in study cycle or non-award courses of Higher Education Institutions.

Preference factors:

Masters thesis or previous projects in NLP and/or ontologies/semantic web; Knowledge of Portuguese; Scientific publications.

Minimum requirements:

Conditions to be admitted to a Computer Science PhD Program in the University of Porto.

5. EVALUATION OF APPLICATIONS AND SELECTION PROCESS:

Selection criteria and corresponding valuation: the first phase comprises the Academic Evaluation (AC), based on the criteria referred to in Article 12 of the Regulations for Grants of INESC TEC, while the second phase comprehends the Individual Interview (EI). All factors are evaluated on a scale of 0 to 100, taking into account the applicants' merit, suitability and conformity with the preference factors.

The weight of the AC factors are as follows: Academic Qualifications (FA, 50%), Scientific Publications (PC, 25%), Experience (EX, 15%) and Motivation Letter (CM, 10%).

Candidates who score less than 50 points in the AC average will be considered excluded on absolute merit. The top five candidates approved on absolute merit will be qualified for the individual interview. The Final Grade (CF) is obtained by the weighted average of AC (70%) and EI (30%).

The Selection Jury is composed of the following members:

President of the Jury: Alípio Jorge Full member: Nuno Ricardo Guimarães Full member: Ricardo Campos

Substitute member: Evelin Freire Amorim

Release of results and prior hearing: the results of the selection process, as well as the terms and procedures for prior hearing, will be released to the applicants by email, under the terms referred to in Article 13 of the Regulations for Studentships and Fellowships of INESC TEC.

6. FORMALISATION OF APPLICATIONS:

Application Documents:

- 1. Motivation letter;
- 2. Curriculum Vitae (must include the list of previous fellowships, their type, beginning and end dates, funding entities and host institutions);
- 3. Certificate or diploma degree dully recognised in Portugal;
 - Documents proving the awarding of academic degrees and diplomas, or the according recognition in cases of academic degrees or diplomas granted by a foreign higher education institution can be dismissed in the application process, and replaced by the applicant's declaration of honour, with the verification of said condition taking place during the grant's hiring stage. The submission of the certificate is mandatory when signing the contract.
 - Academic degrees or diplomas awarded by a foreign higher education institution require an authentication by a Portuguese higher education institution, and the corresponding registration on the DGES platform, in conformity with Decree-Law no. 66/2018, of August 16, and Ordinance no. 33/2019, of January 25. More information available on the website https://www.dges.gov.pt/pt/pagina/reconhecimento?plid=374
- Proof of enrollment in a degree awarding study cycle or in a non degree awarding Higher Education program.
 The proof of enrollment may be presented just during the grant hiring stage.
- 5. Signed declaration stating the infringement of the grant holder's duties (article 14, no. 4)
- Documental evidence to support the country of residence, residence permit or other legally equivalent document, in cases where the applicant is a foreigner or non-resident in Portugal - valid until the beginning of the grant.
- 7. Other supporting documents relevant to the final assessment.

INESC TEC

Instituto de Engenharia de Sistemas e Computadores, Tecnologia e Ciência Associação privada sem fins lucrativos declarada de utilidade pública Pessoa Coletiva 504 441 361 - CRC Porto Campus da FEUP Rua Dr. Roberto Frias 4200 - 465 Porto Portugal T +351 222 094 000 F +351 222 094 050 info@inesctec.pt www.inesctec.pt



Failure to deliver the required documents within the 90-day period after the date of the notice of the conditional awarding of the grant implies its cancellation.

Application period: From 2023-06-21 to 2023-08-31

Submission of applications: the application will be formalised by submitting the form available in the *Work With Us* section of INESC TEC website.

7. BINDING LEGISLATION AND REGULATION

The hiring process shall comply with the current legislation regarding the Research Grant Holder Statute, approved by Law no. 40/2004 of August 18, in its current wording, as well as by the Regulations for Grants of INESC TEC and for FCT Grants Regulation in force.

For more information, please check the Regulations for Grants of INESC TEC and relevant annexes at www.inesctec.pt/bolsas

