

# CALL FOR GRANT APPLICATIONS (AE2025-0081)

INESC TEC is now accepting grant applications to award 1 within the scope of the within the CitiLink project with reference 2024.07509.IACDC/2024, co-funded 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:

General scientific area: COMPUTER SCIENCE

Scientific subarea: Programming, Computer Systems, Informatics, Database management

Area of Work: Computer Science

Grant duration: 7 months, starting on 2025-04-01.

Scientific advisor: Ricardo Campos

Workplace: INESC TEC, Porto, Portugal

Maintenance stipend: €, 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 and evaluate LLM models in European Portuguese for tasks such as event identification, stance detection, text simplification and summarization, with a focus on municipal minutes;

Support the integration of models into operational scenarios;

Support the CitiLink project coordination team in supervising the scholarship holders and in executing the tasks foreseen in the project;

Explore information retrieval systems using RAGs (Retrieval Augmented Generation).

The selected candidate will collaborate with the NLP team at INESC TEC (https://nlp.inesctec.pt) in a dynamic and innovative environment. As part of this team, the candidate will have the opportunity to engage with researchers, master's students, doctoral candidates, and postdoctoral fellows working on diverse topics such as Natural Language Processing, Information Retrieval, Machine Learning, and Information Extraction. The ideal candidate should be enthusiastic about contributing occasionally to other related projects and eager to thrive in a collaborative and multidisciplinary research setting.

#### 3. BRIEF PRESENTATION OF THE WORK PROGRAMME AND TRAINING:

Carry out a survey of the state of the art in NLP for the tasks of event identification, position detection, simplification and text summarization;

Explore, develop and evaluate LLM models in European Portuguese, focusing on the above-mentioned tasks, applied to city council minutes texts;



Make the developed models available in public repositories for wide dissemination;

Contribute to the integration of models into operational scenarios;

Support the CitiLink project coordination team in supervising the scholarship holders and in executing the tasks foreseen in the project;

Actively participate in the project's dissemination activities;

Write and collaborate in the publication of scientific articles;

Prepare and actively participate in project meetings.

#### 4. REQUIRED PROFILE:

#### Admission requirements:

Degree and/ or Master degree in Data Science, Artificial Intelligence, Computer Engineering, Computer Science or similar.

#### Preference factors:

Proficiency in Portuguese (spoken and written), in the European variant, at level C2 of the Common European Framework of Reference for Languages, certified with the respective diploma, or as a mother tongue, given that this is a project that aims to develop models of AI in Portuguese, European variant, based on a diverse set of Portuguese language documents;

Approval at an NLP Course Unit;

Relevant experience in the use and training of LLMs;

Prior participation in Research and Development (R&D) projects.

#### Minimum requirements:

Relevant programming experience (Python);

Experience using NLP libraries such as transformers, PyTorch or Keras;

Fluency in Portuguese and English (spoken and written);

Approval at an Artificial Intelligence (AI) or Machine Learning Course Unit;

Communication skills and ability to collaborate in a team;

Availability to participate in meetings with project partners;

Able to start the contract immediately after selection.

# 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, %), Scientific Publications (PC, %), Experience (EX, %) and Motivation Letter (CM, %).

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 (%) and EI (%).

# **DISABILITY INCENTIVE**

Candidates who present a degree of disability equal to or greater than 90% will benefit from an incentive (20) in the score of the CV Assessment.

Candidates who present a degree of disability equal to or greater than 60% and less than 90% will also benefit from an incentive (10) in the score of the CV Assessment.

Said score may, in these cases, exceed 100 points.

Candidates must demonstrate the degree of disability during the application, namely through the submission of the Multi-Purpose Medical Certificate of Disability, issued in accordance with Decree-Law no. 202/96, of October 23 - currently in effect.

Candidates must declare, in the application form, the type of disability used throughout the selection process, in order to proceed with the required adaptations.



## The Selection Jury is composed of the following members:

President of the Jury: Ricardo Campos

Full member: Alípio Jorge

Full member: Nuno Ricardo Guimarães 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;
- 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.
- 5. Other supporting documents relevant to the final assessment.

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 2025-02-18 to 2025-03-06

**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







