

CALL FOR GRANT APPLICATIONS

(AE2026-0119)

INESC TEC is now accepting grant applications to award 1 Research Grant (BI) within the scope of the project DFence, with reference 18408 (NORTE2030-FEDER-01474400) Co-funded by ERDF - European Regional Development Fund through the NORTE 2030 Regional Program under the scope of Portugal 2030.

1. GRANT DESCRIPTION

Type of grant: Research Grant (BI)

General scientific area: ENGINEERING

Scientific subarea: Computer engineering

Area of Work: Human–Computer Interaction

Grant duration: 6 months, starting on 2026-06-23, with the possibility of being renewed until the end of the project.

Scientific advisor: Davide Rua Carneiro

Workplace: INESC TEC, Porto, Portugal

Maintenance stipend: € 1090.98 or 1359.64, [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:

- To broaden knowledge of the state of the art in the specific scientific field covered by the fellowship;
- To identify and select the appropriate methods for the study in question;
- To develop research skills through the application of the selected methods;
- To apply critical thinking when evaluating the research process and the results obtained.

3. BRIEF PRESENTATION OF THE WORK PROGRAMME AND TRAINING:

The aim of the grant is to investigate, develop and validate an architecture of conversational agents, with orchestration mechanisms and guardrails, for natural language interaction with the DFence system. The work will focus on the design of specialised agents to answer producers' questions, explain KPIs and grazing plans, simulate and propose changes to plans, and validate the safety of interactions. Mechanisms for control, explainability, traceability, authorisation and the prevention of inappropriate responses or actions will be studied, with a view to ensuring human-AI interaction that is safe, transparent and aligned with objectives of animal welfare, agro-environmental sustainability and decision support.

Specifically, the main activities to be carried out by the grant holder are:

- To study conversational agent architectures applied to decision support systems, with a focus on human-AI interaction, explainability, security and safety measures.
- To define use cases for natural language interaction within the DFence context, including data querying, explanation of KPIs, explanation of grazing plans, simulation of changes and generation of recommendations.
- Design a multi-agent architecture for interaction with the Decision Support System, including specialised agents for intention interpretation, context retrieval, explanation, plan modification and validation.
- Develop guardrail mechanisms to ensure that the agent's responses and proposals comply with restrictions regarding safety, animal welfare, agro-environmental sustainability, user permissions and traceability.
- Create a functional prototype of a conversational agent that is integrated, or integrable, with DFence's data and modules.
- Evaluate the prototype using realistic scenarios, measuring response quality, perceived usefulness, clarity of explanations, detection rate of unsafe requests, robustness against ambiguous requests, and ability to support farmers' decisions.

4. REQUIRED PROFILE:

Admission requirements:

- A degree in computer engineering, information systems or a related field;
The awarding of the fellowship is dependent on the applicants' enrolment in study cycle or non-award courses of Higher Education Institutions.

Preference factors:

- Fluency in Portuguese.

- Experience in computer vision techniques, specifically in self-service approaches focused on technology adoption issues.

- Preference will be given to candidates with a master's degree; candidates with a bachelor's degree will only be considered if no master's degree holders apply, or if those who do apply do not have the required background and/or the experience mentioned above.

Minimum requirements:

- A bachelor's degree with an average grade of over 12.

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, 0%), Experience (EX, 30%) and Motivation Letter (CM, 20%).

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 (80%) and EI (20%).

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: Davide Rua Carneiro

Full member: Hugo Miguel Ferreira

Full member: Catarina Moreira Marques

Substitute member: António Lucas Soares

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. 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)
6. 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.

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 2026-05-14 to 2026-05-27

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



**Cofinanciado pela
União Europeia**