CALL FOR GRANT APPLICATIONS

(AE2026-0051)

INESC TEC is now accepting grant applications to award 1 Research Grant (BI) within the scope of the project BringTrust, with reference 18493 (COMPETE2030-FEDER-01489500) Co-funded by ERDF - European Regional Development Fund through the Innovation and Digital Transition Thematic Programme (COMPETE 2030) within the scope of Portugal 2030.

1. GRANT DESCRIPTION

Type of grant: Research Grant (BI)

General scientific area: COMPUTER SCIENCE

Scientific subarea: Informatics

Area of Work: Operating systems

Grant duration: 7 months, starting on 2026-04-01with the possibility of being renewed for a maximum term of two years, in the cases of students enrolled in a master's degree.

Scientific advisor: João Tiago Paulo

Workplace: INESC TEC, Braga , Portugal

Maintenance stipend: € 1040.98, 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:

This grant aims to automate fault injection based on real user reports. In particular, it seeks to design and develop tools that can collect reports related to data durability errors, such as corruption or loss of data that may compromise the integrity or confidentiality of information, and automatically generate configurations to test the injection of the corresponding faults. The grant also aims to explore the development of a DevOps agent based on large language models (LLMs), capable of automatically analyzing reports from code repositories (e.g., GitHub) and generating fault injection configurations to automatically test data durability issues. This solution will be essential to ensure greater robustness, reliability, and security in data-centric applications (for example, databases and machine learning tools).

3. BRIEF PRESENTATION OF THE WORK PROGRAMME AND TRAINING:

The work plan for this grant includes the following main activities:
1. Collection and cataloguing of data durability errors in open-source applications and systems, including the automation of the processes for searching and classifying these errors.
2. Exploration of large language models (LLMs) to automatically extract relevant information from the collected errors and generate fault injection configurations for the LazyFS system.
3. Design of a DevOps agent based on LLMs, capable of automatically analyzing reports from code repositories (e.g., GitHub) and generating fault injection configurations to test data durability issues in an automated manner.

The tasks described in this working plan demand the application and development of concepts and techniques in the area of Software Engineering which are usually introduced in curricular units included in the curricula of the Integrated MSc in Informatics Engineering or the MSc in Informatics Engineering studies.

4. REQUIRED PROFILE:

Admission requirements:

- BSc Degree in Informatics Engineering.

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

Preference factors:

- Knowledge on fault-injection frameworks.

Minimum requirements:

- Knowledge of operating systems.
- Knowledge of storage systems.
- Experience in researching and cataloguing metadata in open-source repositories.
- Proven knowledge and experience in using large language models (LLMs) to understand and automate the extraction of information from reports and complex data, supported by technical evidence (code repositories, projects, functional prototypes, articles, or theses).

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, 60%), Scientific Publications (PC, 10%), Experience (EX, 20%) 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 (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: João Tiago Paulo
Full member: Tânia Esteves
Full member: Ricardo Gonçalves Macedo
Substitute member: Cláudia Vanessa Brito

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 2026-02-19 to 2026-03-04

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