

CALL FOR GRANT APPLICATIONS (AE2025-0243)

INESC TEC is now accepting grant applications to award 1 Research Grant (BI) within the scope of the ATE funded by IAPMEI with reference 56 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: Informatics, Computer Systems

Area of Work: Distributed Systems

Grant duration: 11 months, starting on 2025-07-10, with the possibility of being renewed until the end of the project.

Scientific advisor: Fábio André Coelho

Workplace: INESC TEC, Braga, Portugal

Maintenance stipend: € 1309.64, [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:

This grant is provided in the scope of the project “Aliança para a transição Energética” – (Alliance for the Energy Transition) where a multi-tenant, cloud-based solution to enable an integrated set of cross-domain, interoperable digital services with data from several domains will be design, while allowing a simple instantiation for distinct stakeholders along the energy value-chain.

As data processing moves towards the Edge, the use of the edge-cloud plane requires new tools to provide meaningful and comparable results in terms of performance. In this scope, Edge, Fog and Cloud computing data management systems are particularly relevant, but they require newer strategies for smaller devices such as MCU (MicroController Units) or MPU (MicroProcessor Units) that can add processing capabilities at the edge. This grant is focused in providing data processing solution in MCU /MPU context at the edge and between the edge and the cloud. Namely it will focus in data generated in sensors and data management solutions

3. BRIEF PRESENTATION OF THE WORK PROGRAMME AND TRAINING:

- Research, design and implement distributed protocols that allow to scale processing capabilities in the IoT environment;
- Design, adopt and implement measures that offer data processing at the edge over MCU and/or MPU units; Provide the designed protocols with the capability to dynamically adjust the data processing between the Edge/Fog/Cloud layers;
- Evaluate and assess the performance of the designed protocols;
- Produce scientific publications that contribute at the same time for the PhD in Computer Science

4. REQUIRED PROFILE:

Admission requirements:

MSc holder in computer science or 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 and experience on evaluation of systems;
- Experience with the YCSB benchmarking system and with the TPC-C,TPC-H specifications;
- Experience with data compression algorithms;
- Experience with MicroController Units and/or MicroProcessing Units MCUs and/or MPUs.

Minimum requirements:

- MSc average above 16 in the Portuguese rating system (out of 20);
- At least 1 core A* publication in a conference/workshop related to distributed systems;
- Knowledge in Distributed Systems;
- Excellent spoken and written use of Portuguese and English languages.

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, 20%), 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: Fábio André Coelho

Full member: José Orlando Pereira

Full member: João Tiago Paulo

Substitute member: João Marco

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 2025-06-05 to 2025-06-20

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



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