

CALL FOR GRANT APPLICATIONS

(AE2026-0277)

INESC TEC is now accepting grant applications to award 1 Research Initiation Grant (BII) Multiannual Funding of R&D Units 2025-2029, with the reference UID/50014/2025, Funded by national funds through the Portuguese Foundation for Science and Technology (FCT), I.P.

1. GRANT DESCRIPTION

Type of grant: Research Initiation Grant (BII)

General scientific area: COMPUTER SCIENCE

Scientific subarea: Informatics

Area of Work: Distributed Systems

Grant duration: 8 months, starting on 2026-10-28.

Scientific advisor: Fábio André Coelho

Workplace: Braga

Maintenance stipend: € 701.12, [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:

Data processing nowadays unfold along the computing continuum, that is, merge the raw compute capacity of cloud providers, while being complemented by Edge processing units, that perform computation closer to the Edge, where data is generated. This is particularly important for inference processes within AI models. Therefore, this grant explores the possibility to run AI inference at the edge, applying it namely over microcontroller units (MCUs) and microprocessor units (MPUs). It will assess the execution model, their interoperability and portability interface and execution performance. It will also assess how the project's cloud platform can be complemented with edge computing capabilities. This position will verify the viability to use off-the-shelf AI accelerators such as "AI Hats" available for the Raspberry Pi platform. Moreover, this work will assess how usable and interoperable is the programming interface between the accelerators and the models. Finally, this grant explores the performance capability in edge nodes by evolving a benchmark system tailored to assess the data exchange at edge level. Together, this grant addresses the complementarity of the AI acceleration capability and the performance impacts of data management at the edge.

3. BRIEF PRESENTATION OF THE WORK PROGRAMME AND TRAINING:

- Deployment of standard AI models on top of Microcontroller units (MCUs) and Multiprocessor units (MPUs), namely from Texas Instruments' SK-AM6X series, and STMicroelectronics STM32 series.
- Assessment of the portability possibilities for AI models across different AI accelerators.



- Evaluation of the impact and applicability of ONNX protocols for interoperability.
- Evaluation of the acceleration performance of the MCUs.
- Evolution of an edge benchmarking system prototype.
- Detailed reporting, including performance results, execution limitations, and the possibility for interoperable execution for several model classes.

The tasks described in this working plan demand the application and development of concepts and techniques in Software Engineering which are usually introduced in curricular units included in the curricula of the Licenciatura em Engenharia Informática studies and of the Licenciatura of Ciências da Computação studies.

4. REQUIRED PROFILE:

Admission requirements:

Currently enrolled in the BSc Degree in Informatics Engineering, Computer Science or equivalent.
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 / experience with the ONNX protocol.
- Experience on the application and tuning of Machine Learning using hardware acceleration.

Minimum requirements:

- Experience with benchmarking tools for data processing systems.
- Written and spoken proficiency in Portuguese and English languages.
- Experience with C, C++ or other programming language that is adequate to MCU and MPU programming.

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, 70%), Scientific Publications (PC, 10%), Experience (EX, 10%) 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: João Tiago Paulo
Full member: Cláudia Vanessa Brito
Substitute member: José Orlando Pereira

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 not having benefited from any other research fellowship (Article 5, no. 5)
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 2026-09-24 to 2026-10-08

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

