CALL FOR GRANT APPLICATIONS
(AE2025-0479)

INESC TEC is now accepting grant applications to award 1 Research Initiation Grant (BII) within the scope of the within the scope of the project GENESIS with reference 16995 (COMPETE2030-FEDER-00828300) co-funded by the ERDF - European Regional Development Fund through Innovation and Digital Transition Program - COMPETE 2030 under the scope of Portugal 2030 and by National Funds through the FCT - Fundacao para a Ciencia e a Tecnologia, I.P. (Portuguese Foundation for Science and Technology).

1. GRANT DESCRIPTION

Type of grant: Research Initiation Grant (BII)

General scientific area: COMMUNICATION SCIENCES

Scientific subarea:

Area of Work:

Grant duration: 5 months 28 days, starting on 2025-11-14, with the possibility of being renewed for a maximum term of one year.

Scientific advisor: Tiago Manuel Campelos

Workplace: INESC TEC, Vila Real, Portugal

Maintenance stipend: € 651.12, 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:

- Learning, understanding, designing and developing Explainable Artificial Intelligence (xAI) models to support the understanding of synthetic data generation models;
- Generate explanations for the process of automatic generation of new synthetic datasets, representative of real data, referring to different energy resources;
- Promote the interconnection between data science, scientific communication and digital literacy, contribute to the translation of technical results into narratives accessible to different audiences.

3. BRIEF PRESENTATION OF THE WORK PROGRAMME AND TRAINING:

- Data analysis considering different types of data, e.g., electricity consumption, consumer behavior, photovoltaic and wind generation, electric vehicles, and electricity market prices based on various open-access datasets. The data will be analyzed and processed taking into account the identification of any missing/erroneous entries, adjustment of the data granularity, format, etc.
- Study and review of xAI approaches for synthetic data generation models;
- Development of a new xAI model to explain the process of generating synthetic data. The SHAP model will be used as the basis for the explanations. SHAP will be integrated with a natural language model,
thus enhancing the adaptation and richness of explanations, as well as enabling different types of explanations, namely through graphs, tables and text.

- Study of Explainable Artificial Intelligence techniques, focusing on SHAP and its application to synthetic data generation models.
- Development of models that translate technical processes into simple graphs, infographics and narratives.
- Adaptation of the explanations generated by the models to audiences with different levels of literacy, transforming technical results into accessible narratives.
- Preparation of project reports and dissemination material

4. REQUIRED PROFILE:

Admission requirements:

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

Preference factors:

- Experience with Design and Multimedia platforms: Canva, Adobe Photoshop, Visme; Video editing with Shotcut and Clipchamp
- Experience in analyzing user profiles
- Fluency in English (spoken and written)
- Fluency in Portuguese (spoken and written)
- Experience in scientific dissemination and communication

Minimum requirements:

- Mastery of digital content management/creation tools.

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: Tiago Manuel Campelos
Full member: Tânia Vilela Rocha
Full member: Cátia Silva
Substitute member: Hugo Paredes

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 2025-10-16 to 2025-10-29

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