

PUBLIC NOTICE

Call for allocation of a Scientist Scholarship

Reference: BII/FhP-26/01

The call for allocation of a Research Integration Grant for a Student attending a Bachelor's degree is open and subject to the following conditions:

1. General scientific field: Engineering.

2. Specific scientific field: Bioengineering.

3. Admission Requirements:

- i) Student attending an academic Bachelor's degree in the scientific field mentioned above.
- ii) Knowledge or experience (preferred) on machine learning or computer vision techniques, and interest in developing such skills.
- iii) Good programming skills (Python and C/C++ preferred).
- iv) Proficiency in English and excellent communication skills and teamwork.

4. Work Plan: The selected candidate will join the Intelligent Systems Group and assist in research and development efforts related to controllable generative AI for synthetic image generation.

4.1. Tasks:

- Deepen understanding of controllable generative AI concepts and methodologies for synthetic image generation.
- Design and implement an interactive pipeline for the controllable generation of realistic synthetic images of target insect species on sticky traps, leveraging available open-source interfaces.
- Investigate user-friendly strategies for interacting with generative inference parameters and control mechanisms tailored to the target agricultural use case, supporting multiple generation modes.
- Develop a functional demonstration prototype that showcases the capabilities of the interactive generation pipeline, including exploring the integration of generative models developed within the AgriPestForge project.
- Explore computational approaches for auditing the quality of the synthetic images generated via the developed interactive pipeline.
- Write comprehensive reports on tested approaches and results. Contribute to scientific publications.

These research activities are planned to be developed within the framework of project “AgriPestForge – Controllable Generative AI Engine to Expand Automation in Agricultural Pest Detection, with Notice *Concurso de Projetos de IC&DT em Todos os Domínios Científicos* and Project Reference *COMPETE2030-FEDER-00832000 Projeto No. 17029 – Fundação para a Ciência e a Tecnologia*”.

5. Applicable law and regulation: Portuguese Statute of the Scientific Research Scholarship Holder [*"Estatuto do Bolsheiro de Investigação Científica"*], approved by Law no. 40/2004, of August 18th, amended by Decree-Law no. 202/2012, of August 27th, Law no. 12/2013, of January 29th, Decree Law no. 89/2013, of July 9th (hereinafter referred to as the "Statute"), Law no. 123/2019, of August 28th and the Research Scholarships' Regulation of Associação Fraunhofer Portugal Research (hereinafter referred to as the "Regulation").

6. Place of work: Fraunhofer Portugal AICOS, Porto, Portugal, under the scientific supervision of PhD Luís Rosado.

7. Scholarship's Duration and Regime: The scholarship shall have a duration of 9 months, eventually renewable until the term of the project, with an estimated starting date in 1st of March 2026, according to article 13 of the Regulation and article 3 of the Statute, under exclusivity regime, except for the exceptions expressly set out in nos. 3 and 4 of article 5 of the referred Statute.

(https://www.fraunhofer.pt/content/dam/portugal/fhp/careers/grants/Regulamento_Bolsas_Fraunhofer_Portugal_Research_2021.pdf)

8. Amount of the monthly maintenance allowance: The amount of the scholarship corresponds to €651,12 as per the table of amounts of the scholarships of Associação Fraunhofer Portugal Research.

(https://www.fraunhofer.pt/content/dam/portugal/fhp/careers/grants/regulamento_bolsas.pdf).

The payment of the scholarship shall be made on a monthly basis, by wire transfer.

9. Selection Procedures: The selection procedures to be used shall be made based on the following parameters:

- A. Current average in the Bachelor's degree.
- B. Alignment of academic choices with the work to perform.
- C. Curriculum evaluation in accordance with the objectives of the project.

The selection parameters shall be given the following percentage weighting: 0,2 x A + 0,3 x B + 0,5 x C.

10. Composition of the selection panel:

1. Inês Nunes de Sousa Soares (PhD; Chairman).
2. Luís Filipe Caeiro Margalho Guerra Rosado (PhD; Permanent Member).
3. Maria João Medeiros de Vasconcelos (PhD; Permanent Member).

11. Publication/notification of the results: The final evaluation results shall be published in a list ordered by the final score and posted in a visible and public place at Fraunhofer Portugal. All candidates have 10 days to comment. The approved applicant shall be notified by email.

12. Opening period of the call: The call is open from 23-01-2026 to 06-02-2026.

13. Documents and deadlines for application: Applications must be submitted by means of an application email with the following documents: *Curriculum Vitae*, required qualifications' certificate and other evidencing documents deemed relevant.

Applications should be delivered during the call's opening period, sent by email with acknowledgment receipt to jobs@fraunhofer.pt, in *pdf* format, until 11:59 p.m. on 06th of February 2026.