

PUBLIC NOTICE

Call for allocation of a Scientist Scholarship

Reference: BII/FhP-25/04

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:** Computer Science.
2. **Specific scientific field:** Computer Science, Data Science or Artificial Intelligence.
3. **Admission Requirements:** i) Student attending an academic Bachelor's degree in the scientific field mentioned above; ii) Programming proficiency in Python; iii) familiarity with Machine Learning frameworks such as PyTorch or TensorFlow; iv) Basic knowledge in privacy-preserving machine learning, including federated learning; v) Experience with NVIDIA FLARE framework; vi) 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 Privacy-Preserving Machine Learning (PPML), focusing on Federated Learning (FL). The tasks include:
 - 4.1. **Tasks:**
 - Assist in enhancing an existing federated learning framework, contributing with the implementation of different learning schemes, and increase the modularity of software development.
 - Conduct a systematic evaluation and comparison of the different federated learning schemes across datasets and Machine Learning problems.
 - Contribute to technical documentation, comprehensive reports, and the group's research publications.
5. **Applicable law and regulation:** Portuguese Statute of the Scientific Research Scholarship Holder [*"Estatuto do Bolseiro de Investigação Científica"*], approved by Law no. 40/2004, of August 18, amended by Decree-Law no. 202/2012, of August 27, Law no. 12/2013, of January 29, Decree Law no. 89/2013, of July 9 (hereinafter referred to as the "Statute"), Law no. 123/2019, of August 28 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 Doctor Filipe Soares.
7. **Scholarship's Duration and Regime:** The scholarship shall have a duration of 3 months, eventually renewable for equal periods of time or until the term of the project, with an estimated starting date on July 2025, 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 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 following percentage weighting shall be given to the selection parameters: $0,2 \times A + 0,3 \times B + 0,5 \times C$.
- 10. Composition of the selection panel:** Chairman: Doctor Inês Nunes de Sousa Soares; Permanent Members: Doctor Filipe Cruz Gomes Soares and Doctor Luís Filipe Caeiro Margalho Guerra Rosado.
- 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. The approved applicant shall be notified by email.
- 12. The opening period of the call:** The call is open from 12-06-2025 to 27-06-2025.
- 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 bachelor's degree enrolment 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, by 11:59 p.m. June the 27th 2025.