

**PUBLIC NOTICE****Call for allocation of a Scientist Scholarship****Reference: BI/FhP-22/03**

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

1. **General scientific field:** Engineering.
2. **Specific scientific field:** Computer Science, Data Science, Biomedical Engineering, Electrical Engineering, Mathematics, Physics, or related studies.
3. **Admission Requirements:** i) Student attending an academic Doctorate's degree in the field of Computer Science, Data Science, Biomedical Engineering, Electrical Engineering, Mathematics, Physics, or related studies; ii) Research experience in machine learning; iii) Extensive experience with different platforms for developing machine learning pipelines; iv) Proficiency in English and excellent communication skills and team spirit.
4. **Other relevant criteria:** i) Hands-on experience deploying ML models onto production environments; ii) Experience with data warehousing and ETL frameworks; iii) Proficiency in productization technologies such as (REST) APIs, Docker containers, Kubernetes; iv) Experience in version control of code (e.g., Git), data (e.g., DVC) and models (e.g., MLFlow); v) Interest in supporting the development of Open Science and FAIR Data.
5. **Work Plan:** The Student will perform research activities within the Intelligent Systems Group, integrated into the team of Machine Learning Operations (MLOps) and interacting with researchers from different backgrounds to conceptualize, plan and develop new methods, tools and pipelines to deploy impactful AI-based solutions.

**5.1. Tasks:**

- Contribute to advancing the state-of-the-art in a selection of the following topics: diversity and fairness in distributed privacy-sensitive data, Privacy-preserving ML, CI/CD in ML and its continuous monitoring and maintenance, models cards, Meta-learning, AutoML, MLOps: ML Pipeline from Development to Deployment, Transfer learning, Ensemble learning, Federated learning, Distributed data;
- Collaborate with teammates, clients, partners and domain experts in developing and employing state-of-the-art methods and best practices crossing the entire Machine Learning pipeline, from data storage and annotation to pre-processing, modelling and (scalable) deployment, as well as CI/CD and model monitoring.

- 6. 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”).
- 7. Place of work:** Fraunhofer Portugal AICOS, Porto or Lisbon, Portugal, under the scientific supervision of PhD André Carreiro.
- 8. Scholarship’s Duration and Regime:** The scholarship shall have the duration of 6 months, eventually renewable for equal periods of time or until the term of the project, with an estimated starting date is September, 2022, 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.aicos.fraunhofer.pt/content/dam/portugal/fhp/careers/grants/Regulamento\\_Bolsas\\_Fraunhofer\\_Portugal\\_Research\\_2021.pdf](https://www.aicos.fraunhofer.pt/content/dam/portugal/fhp/careers/grants/Regulamento_Bolsas_Fraunhofer_Portugal_Research_2021.pdf))
- 9. Amount of the monthly maintenance allowance:** The amount of the scholarship corresponds to €1.144,64 as per table of amounts of the scholarships of Associação Fraunhofer Portugal Research ([https://www.fraunhofer.pt/content/dam/portugal/fhp/careers/grants/Reg\\_Bolsas\\_FhP\\_Anexo\\_II\\_Jan2022.pdf](https://www.fraunhofer.pt/content/dam/portugal/fhp/careers/grants/Reg_Bolsas_FhP_Anexo_II_Jan2022.pdf)).  
The payment of the scholarship shall be made on a monthly basis, by wire transfer.
- 10. Selection Procedures:** The selection procedures to be used shall be made based on the following parameters:  
A – Average of previous highest 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:  $0,2 \times A + 0,3 \times B + 0,5 \times C$ .
- 11. Composition of the selection panel:** Chairman: Doctor Inês Nunes de Sousa Soares; Permanent Members: Doctor André Valério Raposo Carreiro and Doctor Maria João Medeiros de Vasconcelos.
- 12. Publication/notification of the results:** The final evaluation results shall be published in a list ordered by final score, posted in a visible and public place at Fraunhofer Portugal. The approved applicant shall be notified by e-mail.
- 13. Opening period of the call:** The call is open from 27-05-2022 to 31-08-2022<sup>(1)</sup>.

**14. 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 e-mail with acknowledgement receipt to [jobs@fraunhofer.pt](mailto:jobs@fraunhofer.pt), in *pdf* format, until 11:59 p.m. of August the 31<sup>st</sup> 2022.

<sup>(1)</sup> *The opening period of the call has been extended from 30-06-2022 to 31-08-2022.*