

## CALL FOR AWARDING RESEARCH FELLOWSHIPS WITHIN PROJECT GRANTS AND R&D INSTITUTIONS

### 1 Research Fellowship under Special Regime (BI-RE) for PhD Student

1 Research Fellowship(s) under Special Regime (BI-RE) is(are) open at the **FCiências.ID – Associação para a Investigação e Desenvolvimento de Ciências**, for the project Very Efficient Deep Learning in IoT (VEDLIoT), under Grant Agreement no. 957197, funded by the European Union's H2020 Research and Innovation Programme, under the following conditions:

1. **Scientific Area:** Computer Science and Engineering
2. **Requirements for admission:** Portuguese nationals, foreign and stateless persons may submit applications to this selection procedure, provided they hold a Master degree in Computer Science, Computer Engineering, or affiliated areas, and comply with the following requirements: a) The master degree must have been granted in the last 4 years; b) Demonstrated scientific and/or professional experience in the areas of Cyber-Physical Systems, Internet of Things and Machine Learning.
3. **Additional optional skills and qualifications:** Knowledge in the distributed systems and dependability areas.
4. **Contracting requirements:** Presentation of the academic qualifications and/or diplomas. Enrollment in the PhD program in Informatics at the Faculty of Sciences – University of Lisbon.
5. **Work plan:** This work will be developed in the context of VEDLIoT project WP5, with the objective of developing solutions for improving the robustness and safety of distributed AI systems. The results provided by ML classifiers can be affected by several kinds of problems. We consider various errors that may accidentally affect the system, from input data errors (e.g., errors in sensor data) to hardware errors (e.g., bit-flips affecting the execution of models). The work will involve surveying the state of the art in Machine Learning robustness, defining an architecture to support monitoring and adaptation/ reconfiguration activities, implementing the defined architecture, and evaluating the results in terms of well-defined performance and robustness metrics (e.g., accuracy, FPR).
6. **Legislation framework:** Research Fellowship Holder Statute, in accordance with Law 40/2004, of 18 August, in its current version and the FCT Regulation for Research Studentships and Fellowships, in its current version (Reg. 950/2019 published in DR on 16<sup>th</sup> December: <https://dre.pt/application/file/a/127230968>, or at the FCT website: <https://www.fct.pt/apoios/bolsas/regulamento.phtml.pt>), and FCIências.ID Fellowship Regulation, as approved on 12<sup>th</sup> May 2020 (available at [Regulamento de Bolsas de Investigação Científica da FCIências.ID](#)).
7. **Place of work:** The work will be developed at the Research Center LASIGE, in Faculty of Sciences, University of Lisbon, Campo Grande, Lisbon, Portugal under the scientific supervision of Professor António Casimiro Ferreira da Costa.
8. **Fellowship duration:** This position is initially opened for 6 months and will begin on November 2021. The fellowship contract may be potentially renewed until the end of the project, in accordance with the provisions of Regulation of Research Fellowships from the Foundation for Science and Technology, I.P and FCIências.ID Fellowship Regulation.
9. **Monthly allowance:** The fellowship amounts to € 1526,47€, according to [table values](#) of the FCIências.ID Fellowship Regulation. The fellowship holder will have a personal accident insurance and can ensure the right to social



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security through adherence to the voluntary social insurance scheme, if not covered by any other social protection scheme, pursuant to *Código dos Regimes Contributivos do Sistema Previdencial de Segurança Social*.

The fellowship will be paid monthly by bank transfer. This research grant includes annual tuition fees divided in the 12 months. It is the student responsibility to pay the annual tuition fees.

10. **Evaluation and selection process:** Candidates will be assessed by the quality of their CV (70%), motivation letter (30%) and possibly, a selection interview. If the jury chooses to carry out the selection interview, it will be to the 3 (three) candidates with the best classification in the curriculum evaluation, and the final evaluation will be as follows: 60% for the curriculum evaluation, 20% for the motivation letter and 20% for the selection interview.

11. **Selection Committee:** Professor António Casimiro Ferreira da Costa (President), Professor José Cecílio (1st Member of the jury), Professor Alysson Neves Bessani (2nd Member of the jury), Professor Pedro Miguel Frazão Fernandes Ferreira (1st Alternate Member of the jury) and Professor Nuno Fuentecilla Maia Ferreira Neves (2nd Alternate Member of the jury).

12. **Publication/notification of results:** All the candidates will be notified by e-mail, sent by the call holder, with the selection meeting minutes enclosed.

13. **Deadlines:** This call for applications is open from 08/10/2021 to 22/10/2021 .

14. **Application:** Applications should be sent via e-mail to [cdrosa@fc.ul.pt](mailto:cdrosa@fc.ul.pt), referring the ID VEDLIOT-BIRE-202104 in the subject, by attaching the following documents:

- a. Curriculum vitae –**CV may be provided in pdf or through the [CIÊNCIAVITAE](#) system;**
- b. Certificate of completion of previous degree;
- c. Motivation letter;
- d. Other documents considered relevant.

15. **Time limits for the appeal procedure:** In case of negative decision, the candidates have 10 business days, after the date of announcement of the results of the candidates' evaluation, to pronounce their disagreement in accordance with the *Código do Procedimento Administrativo*. Appeals against the final decision may be submitted to the Administration Board of FCIências.ID ([fciencias.id@fciencias-id.pt](mailto:fciencias.id@fciencias-id.pt)) within 15 business days after the notification date

**NOTE 1:** The documents that prove the entitlement of the academic qualifications and diplomas, or the proof of registration in the academic degree or diploma requested on the call, can be dismissed during the application period and replaced by a declaration on their honour from the applicant. Their delivery is mandatory for the fellowship contractualization.

**NOTE 2:** Please note that - higher education degrees and diplomas awarded by foreign higher education institutions need to be recognized by a Portuguese higher education institution, pursuant to the [Decree-Law nr. 66/2018](#) (August 16) and the [Ministerial Order nr. 33/2019](#) (January 25). The presentation of the recognition certificate is mandatory for contract signature. More information can be obtained at: <https://www.dges.gov.pt/en/pagina/degree-and-diploma-recognition>.

