

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

### 1 (one) Research fellowship for MSc Student

Ref.: 503.12 – 1 BI EM SEAL

1 Research Fellowship(s) (BI) is(are) open at the **FCiências.ID – Associação para a Investigação e Desenvolvimento de Ciências**, for the project/R&D institution SEAL - SEcurity progrAMming of web applications, PTDC/CCI-INF/29058/2017", (LISBOA-01-0145-FEDER-029058), financed by Fundação para a Ciência e a Tecnologia, I.P./MCTES under national funds (PIDDAC) and financed by the European Regional Development Fund (ERDF) of European Union, under the Competitiveness and Internationalisation Operational Programme of Portugal 2020 or other Programmes that may follow, under the following conditions:

1. **Scientific Area:** Data Science
2. **Requirements for admission:** BSc in Sciences – Information Management
3. **Additional optional skills and qualifications:** Enrolled in 2nd year of a Master's degree in Data Science, working for the master's thesis. Experience with PHP, Python, and C/C++ programming languages; Experience in Computer Security; Knowledge proven by approval in curricular components in the areas of Data Science, Data Prospection, Machine Learning, Advanced Machine Learning, Data Processing Technology, Data Visualization, and Intrusion Detection and Tolerance.
4. **Contracting requirements:** Presentation of the academic qualifications and/or diplomas. Enrolment in MSc studies in Data Science
5. **Work plan:** Literature review of techniques used for identification of vulnerabilities in software and of tools for extracting vulnerable traces from programs; Construction of a dataset with vulnerable and not-vulnerable traces, where traces are characterized by features related to vulnerabilities; Study of machine learning techniques that can be used with the dataset and for identification of vulnerabilities; Design of a model to identify vulnerabilities based on diverse techniques of machine learning; Development and testing of a tool for implementing the proposed model.
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 LASIGE, Faculdade de Ciências da Universidade de Lisboa under the scientific supervision of Professor Ibéria Medeiros.
8. **Fellowship duration:** This position is initially opened for 6 months and will begin in October 2021. The fellowship contract may be potentially renewed for more 3 months.
9. **Monthly allowance:** The fellowship amounts to € 835,98 ,according to [table values](#) of the fellowships awarded directly by the FCT, IP. The fellowship holder will have a personal accident insurance and can ensure the

**FCT** Fundação para a Ciência e a Tecnologia

MINISTÉRIO DA CIÊNCIA, TECNOLOGIA E ENSINO SUPERIOR

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right to social 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.

10. **Evaluation and selection process:** Candidates will be assessed by the quality of their CV : 50% and BSc Degree average: 25%; Research Experience: 15%; Individual interview, if necessary, face-to-face or by videoconference, with the attribution of a classification on a scale of 0 to 20 and a weighting of 10%. If there is no interview, the 10% weighting will be added to the BSc degree average criterion.

11. **Selection Committee:** Chair: Ibéria Vitória de Sousa Medeiros; Members: Nuno Fuentecilla Maia Ferreira Neves and António Casimiro Costa; Replacement Members: Alysso Neves Bessani and Pedro Miguel Frazão Fernandes Ferreira

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 16/09/21 to 29/09/2021 .

14. **Application:** Applications should be sent via e-mail to [lasige-candidaturas@listas.di.ciencias.ulisboa.pt](mailto:lasige-candidaturas@listas.di.ciencias.ulisboa.pt), with the subject: 503.12 – 1 BI EM SEAL, by attaching the following documents:

- a. Curriculum vitae – **CV may be provided in through the [CIÊNCIAVITAE](#) system;**
- b. Certificate of completion of previous degree;
- c. and 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>.