

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

### 1 (one) Research Fellowship (BI) for MSc student

Ref.: 1438.2 – 1 BI EM REACT

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 “Reliable and Expressive Concurrent Systems through Advanced Session Types”, “2023.13752.PEX”, funded by the Fundação para a Ciência e a Tecnologia, I.P. through national funds under the Call for Exploratory Projects in All Scientific Domains 2023, under the following conditions:

1. **Scientific Area:** Programming Science and Technology
2. **Admission requirements:** Completed BSc degree.
3. **Additional optional skills and qualifications:** Experience in software development in the programming languages Haskell and FreeST.
4. **Contracting requirements:** Presentation of the academic qualifications and/or diplomas. Enrolment in Master's degree in Informatics or related field.
5. **Work plan:** FreeST is an experimental concurrent programming language where the communication protocols are the types of channels used to communicate between processes. The work developed under this scholarship aims to provide FreeST with mechanisms to avoid deadlocks, guaranteeing predictable execution and progress, and test the implementation properly.  
Specifically, the work plan consists of:
  1. Design and implement scenarios of circular dependencies that lead to deadlocks in FreeST.
  2. Adapt the non-recursive fragment of the FreeST language to allow deadlock detection at compile time and test the solution.
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 LASIGE research unit, at the Department of Informatics of the Faculty of Sciences, University of Lisbon under the scientific supervision of Professor Andreia Mordido.
8. **Fellowship duration:** This position is initially opened for 6 months due to start in March 2025. The fellowship contract may be potentially renewed for 2 months.
9. **Monthly allowance:** The fellowship amounts to €1040,98, 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 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
  - Analysis of the Curriculum Vitae: 30%
  - Final grade of the B.Sc. degree (on the European Grade Comparability Scale\*): 20%
  - Software development experience in the programming languages Haskell and Freest: 30%

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- Research experience (subject to confirmation by letter(s) of recommendation signed by the supervisor(s) of the previous research project(s)): 20%

\* Holders of pre-bologna degrees are exempt from presenting the European Scale of Comparability in the Degree Certificate. Candidates who do not present their BSc grade on the European Scale of Comparability of Classifications will have their grade converted: grades in the 10-11 range will be converted to 'E'; grades in the 12-13 range will be converted to 'D'; grades in the 14-15 range will be converted to 'C'; grades in the 16-17 range will be converted to 'B'; and grades in the 18-20 range will be converted to 'A'.

Applicants whose application is scored with a final classification of less than 60 points are not eligible for granting a fellowship.

11. **Selection Committee:** President: Andreia Mordido; Effective members: Diana Costa and Pedro Ângelo; Alternate members: Alcides Fonseca and André Souto.

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 27/02/2025 to 13/03/2025 .

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), indicating - otherwise they will not be considered eligible - in the "Subject": Ref. 1438.2 – 1 BI EM REACT", by attaching the following documents:

- Curriculum vitae;
- Certificate of completion of previous degree (with European Grade Comparability Scale\*) <sup>Note 1, 2;</sup>
- Letter(s) of recommendation signed by the supervisor(s) of the previous research project(s) (if there is reference to previous research experience);
- Other documents considered relevant.

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15. **Processing of personal data:** FCIências.ID – Associação para a Investigação e Desenvolvimento de Ciências, as the controller under the General Data Protection Regulation, collects and processes the personal data requested in the context indicated in paragraph 14., under the legitimate interests in ensuring the award of the research fellowship to candidates with the indicated profile.

The personal data will be kept for the period necessary for the execution of the purposes for which they are intended, being ensured the processing and protection in an appropriate and diligent way, the confidentiality and integrity of these data, through appropriate technical and organizational measures.

Personal data may be transmitted to third parties, namely the entity funding the research project, solely for the purposes specifically established. In this sense, whenever the transfer of personal data to countries outside the European Union and/or international organizations is necessary, compliance with the applicable legal provisions is ensured.

You have the right to request access, rectification, elimination, limitation of processing, the right to object and also data portability (if technically feasible), through the e-mail address: [dpo@fciencias-id.pt](mailto:dpo@fciencias-id.pt). You also have the right to lodge a complaint with the National Data Protection Commission.

For more information, we recommend consulting the Internal Rules of Data Protection of FCIências.ID - Association for Research and Development of Sciences at <https://fciencias-id.pt/>.

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16. **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 can be dismissed during the application period and replaced by a declaration on their honour from the applicant ([Minuta PT](#), [Minute EN](#)). 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>.