

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

1 (one) Research Fellowship (BI) for MSc Student

Ref.: 1029.1 – 1 BI EM DACOMICO

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 “DACOMICO: Data Consistency in Microservices Compositions”, “PTDC/CCI-COM/2156/2021”, funded by the Fundação para a Ciência e a Tecnologia, I.P./MCTES through national funds (PIDDAC) under the programme Programme All Scientific Domains, under the following conditions:

1. **Scientific Area:** Computer Science.
2. **Requirements for admission:** BSc completed.
3. **Additional optional skills and qualifications:** Experience with microservices.
4. **Contracting requirements:** Presentation of the academic qualifications and/or diplomas. Enrolment in MSc in Computer Science.
5. **Work plan:** The development of microservice systems requires a complex redesign of the application business logic, due to its consistency in a distributed execution context. On the other hand, there are several architectural styles for the implementation of microservice architectures. In addition, the development of a microservice system is difficult and requires the use of complex technology. Therefore, there is an advantage if software architects can simulate the impact of the implementation of the application business logic in the microservice system in an amenable environment, technology-free, where they can experiment with the architecture design through short feedback cycles. The Microservice Simulator (MS), <https://github.com/socialsoftware/microservices-simulator>, is such simulator that supports the Transactional Consistency Causal (TCC) Model. The candidate is expected to extend MS with the Saga transactional module and develop a large example where the business logic variations using TCC and Saga are compared.
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 16th 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 12th 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, Faculty of Sciences of the University of Lisbon under the scientific supervision of Professor António Rito Silva.
8. **Fellowship duration:** This position is initially opened for 6 months due to start in November 2023. The fellowship contract may be potentially renewed for 3 months.
9. **Monthly allowance:** The fellowship amounts to € 930,98, 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.

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10. **Evaluation and selection process:** Candidates will be assessed by CV (100%). 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: Antónia Lopes; Effective members: Alcides Fonseca, António Rito Silva; Alternate members: Luís Rodrigues, Vasco Manquinho.
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 14/11/2023 to 27/11/2023 .
14. **Application:** Applications should be sent via e-mail to lasige-candidaturas@listas.di.ciencias.ulisboa.pt, indicating - otherwise they will not be considered eligible - in the "Subject": Ref. 1029.1 - 1 BI EM DACOMICO, by attaching the following documents:
- Curriculum vitae;
 - Certificate of completion of previous degree ^{Note 1, 2};
 - Other documents considered relevant.
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. 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/>.
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) 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.

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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>.