

CALL FOR APPLICATIONS FOR 1 (ONE) RESEARCH STUDENTSHIP TO CARRY OUT R&D ACTIVITIES IN THE PROJECT "SYNCHRONIZATION OF DIFFERENT DBS FOR MICROSERVICES", UNDERWAY AT UPDIGITAL OF THE UNIVERSITY OF PORTO

A call is open for 1 (one) Research Studentship for master's degree students to carry out R&D activities in the project "Synchronization of different DBs for MicroServices", underway at the UPdigital functional centre of the University of Porto, under UP Digital's funds (CCO R.06.01.02.01), under the following conditions:

1. Scientific areas: Computer Science and Computer Engineering.

2. Admission requirements:

To apply for the research studentship, applicants must comply with the following requirements, for which documentary evidence must be provided:

- a) Degree in Computer Science, Computer Engineering or related areas¹;
- b) Enrolment in a master's degree in computer science, computer engineering, or related areas - this requirement must be duly proven by the recruitment date.

3. Preferred requirements:

- a) Knowledge of database operations;
- b) Knowledge of database management;
- c) Knowledge of English (level B1 or higher).

4. Work Plan:

4.1. The purpose of this contract is to perform the following tasks:

- a) Design and implement a prototype for data propagation between different data sources and the information systems for that data.
- b) Analyse the structure of U.Porto's information systems and identify the interdependencies between the various components.
- c) Analyse the scalability and availability needs of each identified component. Based on collected works of distributed transaction tools, apply them to the requirements specified and the technologies used at U.Porto.
- d) Propose a structure for the databases.
- e) Develop a procedure for evaluating the best strategy for storing and accessing information for future components.

¹ If the academic degree was awarded by a foreign higher education institution, it must be recognized by a Portuguese higher education institution, under the terms of article 25 of Decree-Law no. 66/2018, of August 16, which approves the legal framework for the recognition of academic degrees and higher education diplomas awarded by foreign higher education institutions, and article 4(2)(e) of Decree-Law no. 60/2018, of August 3, and any formalities set out therein must be fulfilled by the date of the act of hiring.

² Proof of registration must be submitted by the date of recruitment and applicants may attach a declaration on their honor that they meet the registration conditions for the purposes of their application.

4.2. When the academic degree or diploma is awarded during the term of the studentship contracts, the studentship may continue as long as the activities provided for in the work plan have not been completed and under the terms expressly provided for in the call for applications and in the contract, in accordance with Article 10(6) of the University of Porto's Research Studentship Regulation.

4.3. At the end of the scholarship period, a report must be submitted describing the work carried out on the project.

5. Applicable Legislation and Regulations:

The notice and the respective award of the studentship are governed by the provisions of the University of Porto's Research Studentship Regulation - approved by Regulation no. 184/2021, published in *Diário da República*, 2.^a Série, n. 43, 03rd March, hereinafter referred to as Regulation no. 43, of 03rd March; the legal framework for the recognition of academic degrees and higher education diplomas awarded by foreign higher education institutions; the Code of Administrative Procedure (CPA), approved by Decree-Law no. 4/2015, of 7th January; the Research Fellow Statute (EBI), approved by Law no. 40/2004, of 18th August, in the current wording published by Decree-Law no. 123/2019, of 28th August and; other applicable rules.

6. Workplace:

The work plan will be conducted at UPdigital at the University of Porto and/or other locations necessary for implementation under a hybrid regime (coexistence of face-to-face work with teleworking) under the scientific guidance of Professor Pedro Brandão and Engineer Gil Silva.

7. Duration:

The studentship will last for 6 months, possibly renewable, following a positive evaluation, up to the limit of the period of execution of the work plan or funding, and may in no case have a duration of more than two years when the studentship has been awarded to students enrolled in master's programmes, under the terms of no—3 of Article 10 of the Law on the Research and Technological Development.

8. Monthly maintenance allowance amount:

8.1. The monthly maintenance allowance for the studentship is 990,98 €, in accordance with Annex I of the University of Porto's Research Studentship Regulation.

8.2. Payment will be made by U.Porto by bank transfer. In addition to this allowance, personal accident insurance will cover the studentship holder.

8.3. The studentship holder can join the Voluntary Social Insurance Scheme (valid for a studentship contract of six months or more), which is optional (not compulsory), and the reimbursement corresponds to the 1st step of the contribution base.

9. Evaluation methods:

9.1. Curricular assessment (CA) and, if the jury deems it necessary, a selection interview (E) for the first 3 highest ranked candidates in the CA. The final classification will be obtained by the following formula: $0.7x$

$CA + 0.3 \times E$, on a scale of 0 to 20 points. If there is no interview, the final classification will be the same as that obtained in the CA.

9.2. The factors that will be assessed in the CV are:

- a) Average degree classification (40%)
- b) Average master's degree classification for the curricular units that have been passed so far (30%)
- c) Extracurricular activities in which the student has been involved, including participation in seminars, sporting or cultural activities, student association experience, and other academic or professional experience (20%).
- d) Motivation letter (10%)

9.3. The assessment factors for the selection interview, should it be held, will be:

- a) Specific knowledge for carrying out the work plan (50%);
- b) Attitude and availability (20%);
- c) Ability to express oneself (15%);
- d) Motivation for the planned activities (15%).

9.4. The candidates may ask the President of the Jury to authorise their interview by videoconference, stating the reasons for this.

9.5. Failure to attend the interview stage of the selection process is equivalent to withdrawing from the competition, and applicants will be excluded.

9.6. This competition is intended exclusively to fill the vacancy indicated. If no candidate demonstrates that they have the profile required to fulfil the work plan described above within this project's scope, the Jury reserves the right not to award the position.

10. Selection panel:

Chair: Doctor Pedro Miguel Alves Brandão, Assistant Professor and Pro-Rector from the University of Porto;

1st Effective Member: Doctor Ana Maria Cunha Ribeiro dos Santos Ponces Camanho, Associate Professor e Vice-Rector from University of Porto;

2nd Effective Member: Doctor Mário Jorge de Seixas Pimentel, Auxiliar Professor and Pro-Rector from University of Porto;

Substitute member: Doctor Pedro Miguel Barbosa Alves Costa, Associate Professor and Vice-Rector from the University of Porto;

Substitute member: Doctor Joana Rita Pinho Resende, Full Professor and Vice-Rector from the University of Porto.

11. Submission of applications:

11.1. The candidates must be submitted **by 12th of March, 2024 (local time - Lisbon)**.

11.2. The candidates must be formalised using the online application submission system available on the REITORIA website: https://sigarra.up.pt/reitoria/pt/CNT_CAND_GERAL.CONCURSOS_LIST (Ref. 2024/5, no. 365).

11.3. The application must be accompanied by documents proving the conditions set out in this Notice, namely:

- a) Motivation letter indicating willingness to start work from the planned date of recruitment;
- b) Curriculum vitae, with full name;
- c) The copy of the certificate of the required qualification (Bachelor's degree) and the respective recognition of the degree in Portugal if it was obtained at a foreign higher education institution (this recognition can be submitted up to the time of recruitment);
- d) Proof of enrolment in the master's degree indicated in point 2 b) of this Notice or a declaration on honour stating that you meet the conditions for enrolment and that you will provide proof of enrolment by the time you are hired;
- e) Proof of the factors subject to curricular assessment, in accordance with point 9 of this Notice;
- f) Declaration of eligibility (attached).

11.4. The candidates may also attach any other documents they feel are relevant to assessing their merit.

11.5. Failure to comply with the application submission deadline, failure to submit or late submission of the documents referred to in points a) to f) of paragraph 11.3. will result in the application being excluded.

11.6. The documents must be attached directly to the application message without links to external platforms/disks. To ensure that all documents can be read, the preferred saving format is "Portable Document Format" (.pdf). The files must be labelled with the name and surname of the applicant and must not exceed 5 MB in total. These files can be compressed into .zip format.

11.7. The Jury may, whenever it deems it necessary, ask applicants to submit additional documents relating to the facts mentioned in the curriculum vitae submitted, setting a deadline for this, in the following terms:

- a) the documentation referred to is not intended for the presentation of elements not mentioned in the curriculum vitae, nor for the addition of missing documents required by this Notice;
- b) all applicants are informed that additional documentation has been requested.

12. False declarations:

False statements made by candidates will be penalised in accordance with the law.

13. Disclosure of the results:

13.1. Applicants will be notified of the minutes relating to the application assessment phase(s) sent to them by email to the address they provide for this purpose, with a delivery receipt.

13.2. Notifications are made by email under the terms of articles 112(1)(c) and 113(5) of the CPA.

13.3. Under the terms of article 121 et seq. of the CPA, once notified, candidates have 10 working days to comment in writing.

14. Reserve list:

A reserve list will be set up when, as a result of the conclusion of this procedure, the final ranking list contains a number of admitted candidates greater than the number of vacancies. It will be used within a maximum period of 12 months, counting from the homologation of the final ranking list, for situations of non-acceptance, denunciation or others.

15. Policy of non-discrimination and equal access:

The University of Porto promotes a policy of non-discrimination and equal access, thus no applicant may be privileged, benefited, damaged or deprived of any right or exempted from any duty due to ancestry, age, gender, sexual orientation, marital status, family status, economic status, education, origin or social condition, genetic heritage, reduced work capacity, disability, chronic disease, nationality, ethnicity or race, territory of origin, language, religion, political or ideological beliefs or trade union affiliation.

STATEMENT

For the purposes of complying with the provisions of Article 10 of the University of Porto Research Studentship Regulation, I hereby declare that:

- I haven't signed any research studentship/s contract/s to date under the EBI;
- To date, I have signed the following research studentship/s contract/s under the EBI:

Type of studentship	Start Date	End Date	Contracting Authority

I also declare that I meet the eligibility conditions for this studentship, as required under the terms of the aforementioned regulation.

I hereby declare and sign this statement.

Date ____/____/____

Signature _____