



ANNOUNCEMENT FOR THE AWARD OF A RESEARCH FELLOWSHIP

Title: *(Research Fellowship for Doctorate; 1 vacancy)*

Reference: APDI_DSD_01

A call for applications is now open for the attribution of one Research Fellowship for Doctorate within the scope of the R&D project of Algoritmi Center, *Data Science applied to diabetes to increase patient quality of life and rationalize costs*, with reference 01/SAMA2020/2019, under the following conditions:

Scientific Area: Engineering.

Specific Scientific Area: Technologies and Information Systems.

Recipient category: Students enrolled in a **doctoral program** in the area requested in the notice or related area.

Requirement for granting the fellowship:

- The applicants may apply without prior registration in the course for which the fellowship is open. The requirement to enroll in a degree course will be verified on the date of contracting the fellowship;
- Only fellowships whose selected applicants present a valid proof of enrollment in a degree course will be contracted, according to the type of the fellowship, issued by the academic services of the Higher Education Institution, indicating, respectively, the academic year or its duration (star and term).

Candidates profile:

- Candidates must have, at the date of application, a **master degree in Technologies and Information Systems**. Is required for contractualization, proof of academic qualifications completed at the deadline for applications, including those resulting from academic degree recognition processes.

Applicants eligibility: Applicants must comply with the eligibility conditions laid down in article 9 of the Research Fellowships of the University of Minho.

Workplan and objectives to be achieved: The work will consist in activities/tasks associated with the R&D project “Data Science applied to diabetes to increase patient quality of life and rationalize costs”, which aims at, using the AIDA (Agency for Interoperation, Difusion and Archive) platform, the development and implementation of:

- i) a machine learning and optimization model management layer;
- ii) application to a set of use cases to be defined.



Applicable legislation and regulations: Research Fellowship Holder Statutes, approved by Law no. 40/2004 of August 18, in its current version published by Decree-Law no. 123/2019 of August 28; Regulation of Scientific Research Fellowships of the University of Minho, published in “Diário da República”, 2nd serie, no. 119, through dispatch no. 6524/2020 of 22-06-2020, ratified by ratification declaration no. 447/2021 of 22-06-2021 and Regulation of Research Studentships and Fellowships (RBI) of the Foundation for Science and Technology, I.P. - in force.

Host/Contracting institution and scientific supervision: The workplan will be carried out in the Algoritmi Center, School of Engineering of University of Minho, located in the Azurém Campus, Guimarães, under the scientific supervision of Manuel Filipe Vieira Torres dos Santos, Associate Professor with Habilitation at the Department of Information Systems at the School of Engineering at the University of Minho.

Fellowship duration: The grant will take place for a period of **6 months**, with a provisional starting date in November 2023. The scholarship may eventually be renewable, up to 4 years, in the case of a student enrolled in a doctorate. Under no circumstances may it exceed the maximum period allowed by the project and/or provided for in current legislation and regulations.

Amount of the research grant: The value stipend (Monthly Maintenance Allowance) is **1199,64 per month**, in accordance with the stipends values published by the Foundation for Science and Technology (FCT I.P.) in the country (Annex I – Monthly Stipends Values for the maintenance allowances of the FCT Regulation for Research Studentships and Fellowships) and Annex II of the Regulation of Scientific Research Fellowships of the University of Minho (RBIC), published in “Diário da República”, 2nd serie, no. 119, through dispatch no. 6524/2020 of 22-06-2020, ratified by ratification declaration no. 447/2021 of 22-06-2021, according to the applicable regulation. Payment is made on the **23st of each month**, through bank transfer to the Bank Identification Number of the fellow identified in the contractualization process.

Other benefits: Reimbursement of Voluntary Social Security (Social Security contributions), corresponding to the 1st level of discounts (*for research grants with a total duration 6 months or higher*) and personal accident insurance.

Exclusivity regime: The grantee will perform the activities under exclusivity, as foreseen in article 5º of the Regulation of Scientific Research Fellowships of the University of Minho.



Selection panel: The selection panel has the following composition:

President: Manuel Filipe Vieira Torres dos Santos, Associate Professor with Habilitation at the Department of Information Systems at the School of Engineering at the University of Minho.

Effective members: António Carlos da Silva Abelha, Assistant Professor at the Department of Informatics at the School of Engineering of the University of Minho, and Júlio Miguel Marques Duarte, Contracted Researcher at the Algoritmi Research Center, School of Engineering, University of Minho.

Substitute members: Hugo Daniel Abreu Peixoto, Assistant Researcher at the Algoritmi Research Center, School of Engineering, University of Minho and José Manuel Ferreira Machado, Associate Professor with Habilitation, at the Department of Informatics at the School of Engineering of the University of Minho.

The first effective member will substitute the President of the selection panel in case of impediment, being nominate the first substitute member in the place of the first effective member.

Criteria and procedures for applications assessment and selection: The applications assessment will focus on the Candidate's Merit, following evaluation criteria, valued on a scale of 1 to 5 values:

Applicant Merit - AM (100%):

- A. Academic path (which reflects the classifications of academic degrees in the area of Information Systems Engineering and Management) with a weighting of 30%;
- B. Personal CV (which reflects the scientific and professional career), with a weighting of 60%;

Scientific-Technological Experience

- 1. Competencies in applying the CRISP-DM methodology combined with DSR;
- 2. Competencies in modern optimization models for hospital admission resources for patients in physical specialties and responsible specialties;
- 3. Competencies in technologies: NumPy, Pandas, Matplotlib, Math and Google's Colab;
- 4. Competencies in Machine Learning Optimization Algorithms techniques: highlighting, Random Search, Hill Climbing, Simulated Annealing, and Genetic/Evolutionary Algorithm.

Experience in Scientific Publishing

- 5. Articles published in Proceedings of Scientific Conferences Indexed in Scopus. At least 1 publication related to the scholarship themes.
- C. Motivation letter, with a weighting of 10%.

The final classification of the applicant's merit with the achieved through the following formula:

$$AM = (A*0,3) + (B*0,6) + (C*0,1)$$



Candidates who obtain a rating lower than 4,00 values in the Candidate Merit selection method are considered excluded from the final evaluation.

The jury reserves the right not to award one or more scholarships if candidates with the appropriate profile do not present themselves for the competition.

The academic degrees and diplomas documents, or their respective recognition when awarded by foreign higher education institutions are not mandatory in the application phase, being replaced by a declaration of honor of the candidate with the contents of academic results. The documents of academic qualification or respective recognition will be required in the contracting phase and must attest facts that occurred on a date prior to the application. In situations of divergence between the information contained in the declaration and the documentation submitted for contracting the grant, only the information contained in the latter will be considered. If the documents proving the ownership of the academic degree and diploma, or the respective recognition under the terms of Decree-Law No. 66/2018, of August 16, do not correspond to the classifications awarded in the evaluation of the academic path, which can change the candidate's ranking, the fellowship won't be contracted.

Notes: *Applicants with degrees obtained abroad must present proof of recognition of qualifications in Portugal and conversion of the final classification obtained in them to the Portuguese classification scale or declaration under the terms indicated in the previous point. Candidates who do not comply with one of these provisions, the selection panel will assign "0" in the grade of the graduation and/or master course. Candidates will be evaluated on the remaining parameters.*

Disclosure of results: The draft evaluation results, based on minutes, will be sent to candidates via email, in accordance with article 13.º Regulation of Scientific Research Fellowships of the University of Minho.

If case of unfavourable results, the candidates have a period of 10 working days to comment, if desired, in a prior hearing to interested parties, pursuant to articles 121 and 122 of the Code of Administrative Procedure (DL no. 4 / 2015 of January 7th).

[The hearing of the interested parties, if excluded, should be justified accordingly with article 124º of CPA]

Complaint and appeal procedures: The final results of the evaluation will be published through an ordered list (*alphabetically, by final grade obtained*), posted in a visible and public place of the host unit, as well as by email to all applicants, enclosing for that purpose, the minutes of the jury deliberations.

The selected candidate must inform its willingness to accept the grant, in writing. In case of rejection, the fellowship will be awarded to the next candidate in the ordered list of applicants.

Interested parties may also appeal against the final decision, pursuant to paragraph 3 of Article 13 of the Regulation of Research Fellowships of the University of Minho in its current wording.



Application deadline and submission: The call for applications is open from **20/10/2023 till 03/11/2023**.

Applications must be formalized by sending an application letter with the following documents: curriculum vitae; qualifications certificate or declaration of the applicant; motivation letter; statement proving that meets the conditions for the grant typology, according to the application requirements; other documents important to the evaluation process.

Applications must be sent by email to ***recrutamento@algoritmi.uminho.pt***, indicating the reference of the call for applications in Subject. Applications submitted by other means will not be accepted.

Fellowship contractualization: The fellowship will be attributed by signing a fellowship contract between the University of Minho and the fellow, accordingly with the contract minute (annex IV of the Regulation of Research Fellowships of the University of Minho (RBIC), published in *Diário da República, 2nd Série, no. 119*, through dispatch no. 6524/2020 of 22-06-2020, ratified by ratification declaration no. 447/2021 of 22-06-2021, as indicated in 2.4 of the FCT document: “Rules for Granting and Management of Grants within the scope of R&D projects, including infrastructure projects, the multi-annual financing program for R&D units and other FCT financing instruments”.

The contract may only be concluded after all the documentation required is collected, which must take place within a maximum period of 6 months [including evidences of the academic degrees or diplomas and enrolment in degree courses or non-conferring courses, depending on the type of scholarship].

Once all the documentation has been received, the contracting entity has a period of 60 working days to conclude the scholarship contract. Once received, the fellow must return the contract duly signed within 15 working days.

The activities under the fellowship contract can only began after proper authorization by the contracting entity.

Term and cancellation of fellowship contracts: Without prejudice to the other causes provided the fellowship regulations (University of Minho) and in the Statute of the Research Fellow, the fellowship ends with the completion of the work plan, as well as with the expiration date for which it was granted or renewed.

At the end of the fellowship, the grantee is obliged to present a Final Report of the work carried out, in accordance with the objectives and evaluation criteria defined with the scientific advisor, within 30 days after the end of the scholarship.

The **final report** must be prepared in accordance with Annex I of the Scientific Research Fellowships Regulation of the University of Minho, published in *Diário da República, 2nd Série, no. 119*, through dispatch no. 6524/2020 of 22-06-2020, ratified by ratification declaration no. 447/2021 of 22-06-2021.



ANNEX:



Declaration of Honor
Academic habilitations

(name), applicant to the research fellowship vacancy under the I&D project (title or reference), published in the Euraxess portal, reference xxx, hereby declares to have a degree on **XXXX (name of the course)**, concluded in the **University of XXXX**, on the **XX/XX/XXXX**, with the final grade of XX.

I have submit my diploma for recognition in the **University of XXXX**, according to the Decree-Law n° 66/2018 of August 16th, concluded In the XX/XX/XXXX, with the final grade of XX.

I further declare that I undertake to present proof of my diploma recognition obtained under the Portuguese Law, until the date of the conclusion of the fellowship contract, in case of being selected for the vacancy in this competition.

As this is true, this declaration will be dated and signed by me.

(Place), (date).

(name)



Declaration of Honor
Requirements Grant Typology

(name), applicant to the research fellowship vacancy under the I&D project (title or reference), published in the Euraxess portal, reference **(fellowship Reference)**, hereby declares that complies with the conditions for the type of scholarship of the referred call, reference above, in accordance with the application requirements, legislation and regulations indicated in the notice.

As this is true, this declaration will be dated and signed by me.

(Place), (date).
