



Universidade do Minho
Escola de Engenharia



CENTROALGORITMI

ANNOUNCEMENT FOR THE AWARD OF A RESEARCH FELLOWSHIP

Title: Research Fellowship; 1 vacancy
Reference: CALG/ATLANTIDAII/BILIC-2026-02

A call for applications is now open for the attribution of 1 (one) research grant within the scope of the R&D project "ATLANTIDA II: Observatório costeiro do Atlântico Norte de Portugal", reference NORTE2030-FEDER-01799200, cofinanced by FEDER through Northern Regional Programme 2021-2027 (NORTE2030) of Portugal 2030, under the terms of the Call NORTE2030-2024-12 - SACCCT - Projetos integrados de ICDT - Consórcio UNORTE, under the following conditions:

Scientific Area: Engineering

Recipient category: The open position is for bachelor's degree holders who, on the date of their hiring, can prove enrolment in one of the following courses:

- integrated master/master degree;
- Non-conferring degree course.

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 or non-academic 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 or non-academic degree course will be contracted, according to the type of the fellowship, issued by a Higher Education Institution, indicating, respectively, the academic year or its duration (start and term).

Applicants' eligibility: Candidates who meet the conditions set out in Article 9 of the Research Grant Regulations, No. 950/2019, of 16-12-2019, of FCT I.P. are eligible.

Nationals or citizens of other European Union member states, third-country nationals, stateless persons, and citizens with political refugee status are eligible to apply for this competition.

Candidate eligibility requirements:

- Mandatorily, candidates must hold at the time of application a Bachelor degree on Informatics Engineering, Biomedical Engineering, or related areas;
- Preferential factors:
 - a) Knowledge in investigation/research;
 - b) Previous participation in research projects.

Workplan and objectives to be achieved:

The scholarship holders will be based at the ALGORITMI/LASI Centre at the University of Minho, contributing to the Atlantidall project.

The work will focus on the research, development and validation of Artificial Intelligence and Machine Learning algorithms, covering exploratory analysis and pre-processing of data from multiple sources (IoT sensors, Sentinel/Copernicus satellite imagery, operational data), the selection, training and validation of predictive models (LSTM, GRU, TCN, XGBoost) and anomaly detection models (Autoencoders, VAE, Isolation Forest), as well as the application of Explainable AI techniques (SHAP, LIME) to ensure the interpretability of results.

The research fellow will also contribute to the integration of the developed algorithms, support the implementation and evaluation of the operational pilot in collaboration with the project's end-user partners, and contribute to the scientific dissemination of the results through the preparation and submission of articles to indexed scientific journals and participation in international conferences.

The evaluation of the work developed will be verified through the results obtained, to be indicated in an activity report to be prepared by the scholarship recipient.

This research context and methodological approach is appropriate for consolidating the scholarship recipient's scientific training within the scope of the degree-granting course or academic diploma.



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Applicable legislation and regulations: Research Fellow Statute (EBI), approved by Law n.º 40/2004 of August 18, in its current wording and FCT Research Fellowship Regulation, approved by Regulation n.º 950/2019, published in the Diário da República, 2nd series, of December 16, 2019, in its current wording, and Scientific Research Fellowship Regulation (RBIC) of the University of Minho, approved by order n.º 4998/2025, published in the Diário da República, 2nd series, n.º 81, of April 28, 2025 Amended and republished through amendment statement no. 634/2025/2, published in the Official Gazette, 2nd series, no. 132, of July 11.

Host/Contracting institution and scientific supervision: The workplan will be carried out at ALGORITMI Centre of the School of Engineering of the University of Minho, located at the Gualtar Campus, Braga, under the scientific supervision and the coordination of Manuel Fernando da Silva Rodrigues, Assistant Researcher of ALGORITMI Center and Principal Investigator of the project.

Fellowship duration: The grant will take place for a period of **6 months**, with a provisional starting date on **July 2026**. The research grant may, eventually, be renewed up to the maximum limit allowed by the project and/or applicable legislation.

Amount of the research grant: The amount of the grant corresponds to 1 090,98€/ month, according to the table of FCT grants in the country (<https://www.fct.pt/wp-content/uploads/2026/03/Tabela-de-Valores-SMM-2026.pdf>) and the table of values of the Scientific Research Scholarships of the University of Minho, updated annually by decision of the Management Board.

Payment is made until the 23rd of each month, through bank transfer to the fellowship holder's NIB indicated in the contracting process.

Other benefits: Reimbursement of Voluntary Social Insurance, if the candidate chooses to receive it, 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 Research Fellow Statutes and applicable regulations.

Selection panel:

President:

Manuel Fernando da Silva Rodrigues, Assistant Researcher of ALGORITMI Center, School of Engineering, University of Minho;

Effective members:

Paulo Jorge Freitas de Oliveira Novais, Full Professor at the Informatics Department, School of Engineering, University of Minho;

José Manuel Ferreira Machado, at the Informatics Department, School of Engineering, University of Minho.

Substitute members:

António Luís Duarte Costa, Associate Professor at the Informatics Department, School of Engineering, University of Minho.

António Carlos Silva Abelha, Assistant Professor with Habilitation at the Informatics Department, School of Engineering, 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 0 to 20 values.

A. Applicant Merit - AM (100%)

A.1: Academic path, which reflects the area of training of the course and the grades of the academic degrees, with a weighting of 40%;

A.1.1: Area of training of the course, accordingly with Table A.1.1 established in the criteria definition minutes, with a weighting of 50%;

A.1.2: Grades of academic degrees, with a weighting of 50%;

A.2: Personal curriculum (which reflects the scientific and professional background), with a weighting of 40%;

A.2.1: Technical knowledge in Artificial Intelligence and Machine Learning, with a weight of 40%;

A.2.2: Research knowledge and Participation in Projects, weighted at 20%;

A.2.3: Ability to Disseminate Scientific Knowledge, weighted at 20%;

A.2.4: Software Architecture and Data Flow Integration, weighted at 20%.

A.3: Motivation and/or recommendation letter, with a weighting of 20%.

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

$$AM = (A.1 \times 0,4) + (A.2 \times 0,4) + (A.3 \times 0,2)$$

Since $A.1 = (A.1.1 \times 0.5) + (A.1.2 \times 0.5)$ and $A.2 = (A.2.1 \times 0,4) + (A.2.2 \times 0,2) + (A.2.3 \times 0,2) + (A.2.4 \times 0,2)$

Tabel A.1.1 - Auxiliary Table of Areas of Study

Área da Formação	Valoração
Informatics Engineering	20
Biomedical Engineering	20
Related Areas	15
Other Areas	0

If the jury does not consider itself able to decide using the method indicated in A (AM), it may choose to conduct an Interview. In this case, AM will have a weighting of 60% and the candidates classified in the first 8 positions, who obtain the minimum classification of 13 in the AM, will be admitted to the Interview phase, with the Jury evaluating the following sub-criteria:

B. Interview, ENT (40%):

B.1: Interpersonal skills: **30%**;

B.2: Demonstrated knowledge in the area in the competition **40%**;

B.3: Motivation **20%**;

B.4: Language skills **10%**.

The Interview classification (ENT) will be obtained by applying the following formula:

$$ENT = (B.1. \times 0.3) + (B.2. \times 0.4) + (B.3. \times 0.2) + (B.4. \times 0.1)$$

The final classification (CF) of the Candidate's Merit (MC) and Interview (ENT) will be obtained by applying the following formula:

$$CF = (MC \times 0.7) + (ENT \times 0.3)$$



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Candidates who obtain, in the AM, INT and FC classification, a value lower than 10 (ten) points, are considered excluded from the competition.

If none of the candidates demonstrate to have an appropriate profile for the execution of the work plan, the Jury reserves the right to close this call without selecting a candidate.

The final ranking of candidates will be expressed on a scale of 0 to 20 points and will result from the weighted arithmetic average of the quantitative scores obtained in each selection method.

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 (**Annex I**) 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.

The degree recognition must include the respective conversion of the final classification obtained in the foreign qualification, to the Portuguese classification scale. Candidates who do not comply with these terms, when there is a selection method in which the final grade of the course is indicated as an evaluation criterion, the jury will assign a classification of 0 (zero) values in that component.

In the application stage, when a declaration of honor is presented in replacement of degree recognition by a Portuguese higher education institution, and the degree recognition process has not yet been completed, the indication of the final grade of the academic degree will not be admitted as evidence for evaluation, when there is a selection method in which the final course grade is indicated as an evaluation criterion. Thus, in this situation, or when presenting only a certificate of qualifications from a foreign institution, the jury will assign a classification of 0 (zero) values in the aforementioned selection method.

Application deadline and submission: The call for applications is open from **05/06/2026** till **19/06/2026**.

Applications must be submitted by email to **recrutamento@algoritmi.uminho.pt**, indicating the reference number of the competition in the subject line. Only applications submitted within the established deadline and accompanied by the following documents will be accepted:

- Candidate's updated *curriculum vitae*;
- Certificates of the academic degrees necessary for evaluating the requirements and selection criteria mentioned in the call or declaration of honor of the candidate (if applicable).
- Other documents considered relevant by the candidate for the application.

Form of publication/notification of results: The results of the evaluation are published in a single list by final score obtained), posted in a visible and public place in the host unit, as well as by email to all candidates, attaching, for this purpose, the minutes of the jury's deliberations, within a maximum period of 90 working days from the deadline for submission of applications.

Candidates are informed, at a preliminary hearing, in accordance with Articles 121 and 122 of the Administrative Procedure Code, of the likely outcome of the final decision, and may comment within 10 working days of this notification.

An appeal may be lodged against the final decision within 15 working days, or an appeal may be lodged with the highest executive body of the funding entity within 30 days, both after the respective notification (Article 12(n°6) of the FCT Research Grant Regulations).

Within 10 working days of notification of the grant award, the applicant must declare their acceptance in writing. In case of non-acceptance, the next highest ranked applicant will be notified immediately.

Constitution of a selection reserve list: The applicants ranked in the next positions on the ordered list will be included in a selection reserve list, which can be used until **30/11/2026**.



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Fellowship contractualization: The scholarship is awarded through the signing of a contract between the University of Minho and the scholarship recipient, in accordance with point 2.4 of the Rules for the Award and Management of Scholarships https://www.fct.pt/wpcontent/uploads/2022/03/Normas_de_Atribuicao_de_Bolsas_2021.pdf and the draft contract in Annex II of the University of Minho's Scientific Research Scholarship Regulations.

The contract can only be signed after receipt of all the documentation required for the type of scholarship, which must occur within a maximum period of 6 months, including proof of academic degrees or diplomas, as well as enrollment in non-degree study cycles or courses, as applicable.

Once all the documentation has been received, the contracting entity has 60 working days to sign the scholarship contract. Once received by the scholarship holder, the contract must be returned, duly signed, within 15 working days.

Term and cancellation of fellowship contracts: Without prejudice to the other grounds laid down in the University of Minho's Scientific Research Scholarship Regulation and in the Research Fellow Statute, the scholarship will cease on completion of the contracted work plan, as well as on expiry of the period for which it was granted or renewed.

The final report must be submitted to the scientific advisor, in accordance with the defined objectives and evaluation criteria, no later than 60 working days after the end of the scholarship and must be drawn up in accordance with Annex I of the Regulations of the University of Minho.

Non-discrimination and equal access policy: University do Minho actively promotes a policy of non-discrimination and equal access, so that no candidate may be privileged, benefited, harmed or deprived of any right or exempt from any duty due, namely, to ancestry, age, sex, sexual orientation, marital status, family status, economic situation, education, social origin or condition, genetic heritage, reduced working capacity, disability, chronic illness, nationality, ethnic origin or race, territory of origin, language, religion, political or ideological convictions and trade union membership.



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Declaration of Honor Academic qualifications

I, (full name), candidate for the vacancy for the award of a (type of scholarship), within the scope of the project (name or reference of the project), published on the Euraxess portal, with the reference (ref. notice), declare on my honor that I have completed the academic degree of (academic degree), qualifying for the type of scholarship in the competition, namely the course (designation), by the (University conferring the degree), on the date XX/XX/XXXX, with a final average of XXXXX values on the YY scale.

As it is not possible for me to present proof of qualifications until the end of the competition, I declare that I undertake to present the aforementioned certificate at the conclusion of the scholarship contract, in the event that I am selected for the vacancy in the competition.

As this is true, I hereby date and sign this declaration.

(Place), (date).

(full name)

NOTE: The declaration may only attest to facts that occurred prior to the application.

In the event of a discrepancy between the information contained in the declaration and the documentation submitted for the purpose of contracting the scholarship, only the information contained in the latter will be taken into account.





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Declaration of Honor

I, (full name), bearer of identification document number (XXXX), candidate for a research grant (type of grant), within the scope of the project (name or reference of the project), published on the Euraxess portal, with the reference (ref. call for proposals), declare on my honor that (I have not received any research grants to date / I have received the following research grants) under the Research Grant Holder Statute.

University	Financing Entity	Project	Type of Grant	Duration	Start	Term

As this is true, I hereby date and sign this declaration.

(Place), (date).

(full name)

