

NOTICE OF OPENING OF AN INTERNATIONAL SELECTION PROCEDURE FOR THE RECRUITMENT OF 1 ASSISTANT RESEARCHER, WITH AN OPEN-ENDED CONTRACT

1. By order of 22/10/2024, the Dean of FEUP, Professor Doctor Rui Artur Bártolo Calçada, deliberated to open for a period of 15 working days, counting from the working day immediately following the publication of this notice in the “Diário da República”, an international selection procedure for the recruitment of **one (1) Assistant Researcher** (permanent position), under the Regulation for Research, Science and Technology Personnel of the University of Porto, Regulation Nr. 487/2020, of 22 May, hereinafter referred to as RDIUP, in its current version, by the Portuguese Labor Code, in its current version and by other applicable legislation and regulatory standards, for the **scientific field of Intelligent Systems**, of the R&D Unit Artificial Intelligence and Computer Science Laboratory (LIACC), of the Department of Informatics Engineering of the Faculty of Engineering of the University of Porto (FEUP). This contract will be funded by national funds through FCT/MCTES (PIDDAC).

This recruitment is being carried out in accordance with the FCT-Tenure Programme and with the funding line provided for in Article 137 of the Lei do Orçamento de Estado of 2024 to promote the hiring of doctoral graduates exclusively for permanent positions by integrating them into research careers.

2. Composition of the Jury

By nos. 1 and 2 of article 22 of the RPIUP and in accordance with the respective appointment order, the jury has the following composition:

President

Professor Doutor João Manuel Paiva Cardoso, Professor Catedrático da Faculdade de Engenharia da Universidade do Porto

Vowels

Professor Doutor Luís Miguel Parreira e Correia, Professor Catedrático do Departamento de Informática Faculdade de Ciências da Universidade de Lisboa

Professor Doutor Paulo Jorge Freitas de Oliveira Novais, Professor Catedrático do Departamento de Eng. Informática da Universidade do Minho

Professor Doutor José Nuno Pannels Nunes Lau, Professor Associado do Departamento de Eletrónica, Telecomunicações e Informática da Universidade de Aveiro

Professora Doutora Brígida Mónica Teixeira de Faria, Professora Coordenadora da Escola Superior de Saúde do Instituto Politécnico do Porto.

Professor Doutor Henrique Daniel de Avelar Lopes Cardoso, Professor Associado da Faculdade de Engenharia da Universidade do Porto

3. Remuneration

The monthly remuneration is provided in Annexes I and II of RPIUP, corresponding to level 9 of the 1st remuneration position, in the amount of 3.427,59 €, on exclusive dedication.

4. General admission requirements

The applicants may be national, foreign and stateless, who hold a Doctor's degree in Informatics Engineering, Artificial Intelligence, or a related area, with a scientific and professional curriculum that reveals an adequate profile for the activity to be developed and with relevant experience in the scientific area to which they apply.

If the doctoral degree was awarded by a foreign higher education institution, it must be recognised by a Portuguese higher education institution under the terms of article 4.º of the Decree-Law no. 66/2018, published in the Official Gazette, 1st series, no. 157 of 16 August. This formality must be accomplished before the time of signing the contract.

5. Special admission requirements

5.1. If the applications are admitted according to the criteria in paragraph 4., the Jury shall decide on their approval or non-approval by justified nominal vote, and abstentions are not allowed, raising the special admission requirements.

5.2. The candidate approved by an absolute majority of the voting jury members shall be considered approved.

5.3. The approval of the candidates depends on assessing the scientific and curricular path compatible with the disciplinary area for which the call was opened and suitable for the performance of functions in the respective category of researcher, as documented in the respective curriculum vitae.

5.4. For the evaluation mentioned to in the preceding paragraph, the favorable vote shall be based cumulatively on the qualitative and quantitative requirements, and, to determine the appropriate profile for the activity to be carried out, the applicant should:

- a) Have a very good command of and experience in emerging areas of intelligent systems, artificial intelligence, computational learning and natural language processing, with an emphasis on the field of large language models.
- b) Have experience in developing scientific research projects in the area of Intelligent Systems.

- c) Be an author or coauthor of quality publications in reputable journals and conferences in the area of Intelligent Systems.
- d) Present a development plan in the scientific area in which the recruitment process is open, whose scientific component is clearly included in a topic compatible with the competencies in paragraph a) and with the strategic guidelines of the LIACC research unit.
- e) Have experience in advanced training (PhD and master's supervision and training actions) and teaching in higher education institutions in the indicated recruitment area.

6. By Article 26 of the RPIUP, the selection is made through the evaluation of the scientific and curricular careers of the candidates.

7. The evaluation of the scientific and curricular career, considering the appropriate profile for the activity to be developed, focuses on the relevance, quality, and current impact of the following criteria:

- a) Scientific, technological, cultural, or artistic production from the last five years that the candidate considers most relevant to the recruitment domain, as well as applied or practice-based research deemed to have the most significant impact in the recruitment area.
- b) Activities related to the extension and dissemination of knowledge, particularly in the context of promoting culture and scientific practices, that the candidate considers most relevant.
- c) Management activities in science, technology, and innovation programs, or experience in observing and monitoring the scientific and technological system.

8. Selection methods

8.1. By Article 26 of the RPIUP, the selection is made through the evaluation of the scientific and curricular careers of the candidates.

8.2. The selection process will take place in two phases:

8.2.1 Evaluation of the Scientific and Curricular Path (APCC).

8.2.2 Professional Interview (EPS), to be held for the three candidates with the best score in the Evaluation of the Scientific and Curricular Path (APCC).

9. Evaluation of Selection Methods

Each jury member evaluates the scientific and curricular trajectory of each admitted candidate on a scale of 0 to 100 points, using scoring up to two decimal places. The classification is obtained through the weighting defined in the criteria to be evaluated.

10. Evaluation Method for the Scientific and Curricular Path (APCC)

For the evaluation of the Scientific and Curricular Path (APCC), the following criteria are weighted according to the requirements of the duties corresponding to the position for which the recruitment procedure is open:

- a) Scientific performance in the field or subfields for which the competition is open.
- b) Transfer and valorization of knowledge.
- c) Management and communication of science and technology.

11. Evaluation of the Scientific and Curricular Path (APCC)

In applying the criteria mentioned in point 10, the following parameters are evaluated, with the weighting factors indicated:

- **DC: Scientific Performance in the field or subfields for which the recruitment procedure is open.**

DC₁ - Scientific Production. Quantity and quality of scientific production, indexed in Scopus and/or Web of Science, in the area and specific domain for which the recruitment process is open (as mentioned in paragraph 5.4), including books, journal articles, conference papers and conference presentations, expressed by the number and type of publications and the recognition they receive from the scientific community (reflected in the quality of the publication venues and references by other authors).

DC₂ - Coordination and Participation in Scientific Projects. Quality and quantity of scientific projects in which the candidate participated, in the specific area and domain for which the recruitment process is open, funded on a competitive basis by public funds through national or international agencies or companies, and the results obtained. The evaluation considers the candidate's contribution (coordination or participation), the amount of funding obtained, the level of competitiveness of the funding program, the evaluations of completed projects, and any prototypes developed, in particular if they were followed by products or services.

DC₃ – Advanced training. Advanced training and teaching activity, duly within the maximum limits defined by legislation: a) advanced training (PhD and master's supervision and training actions) in higher education institutions in the indicated area of recruitment; b) experience, scope and quality of the teaching activity carried out by the candidate in the specific area and domain for which the recruitment process is open.

DC₄ - Development plan. The candidate must frame the future research they intend to carry out, contextualizing the state of the art and the research strategies they intend to adopt, compatible

with the strategic guidelines of LIACC. A document with a maximum of 10 A4 pages (Arial font, size 11, space 1.5 and margins 2.5 cm) must be submitted.

- **TVC: Transfer and Valorization of Knowledge.**

TVC₁ - Patents, registrations, and ownership rights, preparation of technical standards and legislation. Authorship and co-authorship of patents, intellectual property rights registrations on software, mathematical methods, and mental activity rules. Participation in the development of legislative projects and technical standards.

TVC₂ - Projects with companies and institutions and consulting services. Coordination and participation in projects with companies and institutions aimed at improving products and services; Coordination and participation in consultancy activities involving the business community and the public sector; Specialized services aimed at solving problems requiring advanced knowledge, requested by external entities.

TVC₃ - Science and Technology Dissemination. Coordination and participation in scientific and technological dissemination initiatives aimed at the scientific community (e.g., organizing conferences and symposia) and targeting various audiences. Publications of scientific and technological dissemination in the specific area and domain relevant to the recruitment process.

- **GCCT: Science and Technology Management and Communication.**

Activities related to the management and communication of science and technology in the field for which the recruitment process is open: (a) participation in management bodies or performance of duties relevant to the mission of the University of Porto, especially the research unit in which the recruitment is framed; (b) active contribution to the definition and fulfilment of scientific policies, particularly open science; (c) collaboration in evaluation committees for activities of a technical and scientific nature, promoted by national or international entities, namely within the scope of calls for projects, scholarships or prizes.

12. Professional Selection Interview (EPS)

12.1 In the application of the selection method through the interview (**EPS**), the Selection Committee will assess the following factors:

EPS₁ - Didactic-pedagogical skills, including oral expression abilities, interpersonal relationship skills, and knowledge of Portuguese and English. The depth and scope of knowledge in didactics and pedagogy within the context of higher education teaching will be evaluated, as well as the essential competencies for effective advanced training, particularly oral expression abilities and

fluency and coherence in Portuguese and English.

EPS₂ - The breadth of education and scientific knowledge acquired in the specific area and domain for which the recruitment process is open. The depth and scope of scientific knowledge in the relevant area and domain for the application will be assessed, according to what is mentioned in paragraph 5.4.

12.2. The weighting of each factor mentioned in the preceding paragraphs is as indicated in the tables in Annex I.

13. Voting methodology of the jury

13.1. The jury's deliberations are taken by absolute majority, and abstentions are not allowed.

13.2. After the admission of the candidates, and before starting the votes for the final ranking of the candidates, in the Evaluation of the Scientific and professional path, each member of the jury presents a written document to be attached to the minutes, with an orderly list of candidates in descending order of merit, duly substantiated, considering the criteria and parameters of the present call.

13.3. The Jury will use the following selection methodology:

- a) The candidate who, in each voting, obtains the absolute majority will be positioned in the place to order.
- b) Voting shall be carried out by the method of successive voting.
- c) By point 14.2, the Jury votes initially for the first place, then for the second place and so on until the final ranking of all the candidates admitted to the recruitment process.
- d) If a candidate obtains an absolute majority of the votes, he or she is ordered into the place that is being voted and is removed from the scrutiny, and the procedure to choose the candidate who will occupy the next seat begins, and so on.
- e) If an absolute majority of the votes is not reached in the voting for any of the places, the Jury shall proceed to repeat the voting for the place in question, but excluding in each of the voting held, up to a limit of three, the candidate with the least votes, in order to find a candidate who reaches the absolute majority of the votes.
- f) In the event of a tie to determine the candidate with the lowest number of votes, under the terms of the preceding paragraph, the Jury shall repeat the voting up to a limit of three, only among the candidates in a tie situation, and the candidate with the lowest number of votes shall be excluded from each voting session.

13.4. If an absolute majority of the votes are not reached after the votes provided for in paragraph

13.3, or if the tie remains, the President of the Jury will have a vote of quality.

13.5 In the various votes, each member of the Jury shall comply with the order which he/she has presented in the document referred to in paragraph 13.2.

13.6. From the jury meetings, minutes containing a summary of what has occurred therein are drawn up, indicating the meaning of the votes by each member and their reasons.

14. Application formalisation

Applications must be submitted exclusively on the FEUP website at the following address: <http://www.fe.up.pt/concursos> Refª On-line 1236.

15. Processing of the applications

15.1. The application must include the following documents, where documents contained in points a) to d) are mandatory:

- a) *Curriculum Vitae*, containing all the information relevant to the evaluation of the application, considering the selection methods of this notice, namely the information on scientific publications of the SCI or SCOPUS databases, including quartiles of journals, impact factors of journals and citation indicators. The applicant shall structure the curriculum in such a way as to facilitate the rapid and complete identification of his contribution in the scientific area in which the call is opened in each of the subparagraphs specified in the selection methods.
- b) Certificate of Qualifications proving the ownership and date of obtaining the degree required for the call and, where applicable, the recognition of that degree, title or certificate under the terms of paragraph 4.
- c) Scientific publications, selected by the candidate, up to a maximum of 5, duly justified, which the candidate considers the most significant for the recruitment area.
- d) Development plan in the scientific area in which the recruitment process is open, whose scientific component is clearly included in a topic compatible with the competencies in paragraph a) of paragraph 5.4 and with the strategic guidelines of the LIACC. A document with a maximum of 10 A4 pages (Arial font, size 11, space 1.5 and margins 2.5 cm) must be submitted.
- e) Any documents considered relevant by the candidates for the assessment of their merits.

15.2. Candidates whose graduation has been obtained in the University of Porto are exempted from presenting the supporting documents that are part of their individual process.

15.3. Failure to comply with the deadline for submission of the application, failure to submit or

submission of any of the documents referred to in points a) to d) of point 15.1, of mandatory submission, shall determine the exclusion of the application. The decision to exclude shall be communicated to applicants by e-mail for the purpose of holding the hearing of the concerned applicant.

15.4. When necessary, the Jury requests the candidates to provide additional documentation related to the presented curriculum vitae, under the following terms: a) the documentation referred to is not intended for the presentation of elements not mentioned in the curriculum vitae, nor to the delivery of missing documents required in the notice; b) all candidates are made aware that additional documentation has been requested.

16. False statements

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

17. Participation to the candidates and decision.

17.1. The draft decision on the final ranking of candidates shall be notified by e-mail, with a receipt for delivery of the notification, for the purposes of the hearing of the persons concerned, by the Code of Administrative Procedure.

17.2. The deadline for candidates to be heard in writing is ten working days from the first working day immediately following the delivery date of the message, by the Code of Administrative Procedure.

17.3. After the hearing of the concerned candidates, the Jury appreciates the allegations.

17.4. After the deadline for hearing the concerned candidates, without any candidate expressing an opinion, the draft decision is converted into a final decision.

18. Final decision period

18.1. Within 90 days of the deadline for the submission of applications, in which the counting is suspended during the hearing of the interested parties, the jury's final decision shall be given.

18.2. The final ranking of candidates is submitted for approval by the Rector of the University of Porto, and the candidates are notified as defined in paragraph 17.1.

19. Policy of non-discrimination and equal access: FEUP actively promotes a policy of non-discrimination and equal access so that no candidate may be privileged, benefited, impaired or deprived of any right or exempt from any duty due to, inter alia, ancestry, age, sex, sexual orientation, marital status, family situation, economic situation, education, origin or social condition, genetic

heritage, reduced working capacity, disability, chronic illness, nationality, ethnic origin or race, territory of origin, language, religion, political or ideological convictions and syndical affiliation.

20. Under D.L. No. 29/2001 of February 3, a disabled candidate is preferred in case of a tie, which prevails over any other legal preference. Candidates must declare in the application, under a commitment of honour, their degree of disability, the type of disability and the means of communication/expression to be used in the selection process, under the terms of the aforementioned diploma.

Faculty of Engineering of University of Porto, 22/10/2024

Dean of FEUP - Professor Rui Artur Bártolo Calçada

Annex I

Table 1. Weights of criteria and sub-criteria of the evaluation of the scientific and curricular career

Criterion	Weight	Sub-criterion	Weight
DC (Scientific performance)	0,70	DC₁ (Scientific Production)	0,40
		DC₂ (Coordination and participation in scientific projects)	0,25
		DC₃ (Advanced training)	0,10
		DC₄ (Development plan)	0,25
TVC (Valorization and Knowledge Transfer)	0,20	TVC₁ (Patents, registration and intellectual property)	0,20
		TVC₂ (Projects with companies and consulting services)	0,50
		TVC₃ (Dissemination of science and technology)	0,30
GCCT (Science and Technology Management)	0,10	Activities of management and communication of science and technology	1,00

Evaluation of the Scientific and Curricular Path

$$DC = 0,40 \times DC_1 + 0,25 \times DC_2 + 0,10 \times DC_3 + 0,25 \times DC_4$$

$$TVC = 0,20 \times TVC_1 + 0,50 \times TVC_2 + 0,30 \times TVC_3$$

$$APCC = 0,70 \times DC + 0,20 \times TVC + 0,10 \times GCCT$$

Table 2. Weights in the professional interview

Criterion	Peso
EPS ₁ (Didatic-Pedagogical Skills)	0,50
EPS ₂ (Scope of the formation and scientific knowledge)	0,50

Professional Interview

$$EPS = 0,50 \times EPS_1 + 0,50 \times EPS_2$$

Table 3. Weight of the selection methods

Methodology	Peso
Curricular evaluation (APCC)	0,70
Interview (EPS)	0,30

The final result (RF) shall be calculated by:

$$RF = APCC \times 0,70 + EPS \times 0,30$$