

ANNOUNCEMENT FOR THE AWARD OF A RESEARCH GRANTS FOR APPLIED ARTIFICIAL INTELLIGENCE LABORATORY (2Ai)

Title: Announcement for four (4) Research Grants - PhD Research Scholarships

Reference: PhD_HP_2AiPRR_1-2-3-4

Number of positions: 4

Project: HfFP – Health From Portugal

The Laboratory of Applied Artificial Intelligence (2Ai), a R&D unit of the School of Technology (EST) of the Polytechnic Institute of Cávado and Ave (IPCA), open a call for four (4) Research Scholarships (BI - PhD Students), within the scope of the Innovation Pact HfFP – Health From Portugal (Notice No 01/C05-i01/2021, Mobilising Agendas/Alliances for Reindustrialisation RE-C05-i01.01 and Green Agendas/Alliances for Business Innovation RE-C05-i01. 02) under and by co-financing the "Mobilising Agendas for Business Innovation" of the Next Generation EU programme of Component 5 of the Recovery and Resilience Plan (RRP), relating to "Capitalisation and Business Innovation", under the Regulation of the Incentive Scheme "Agendas for Business Innovation".

The study takes place at the Applied Artificial Intelligence Laboratory (2Ai), a R&D unit at the School of Technology of the Polytechnic Institute of Cávado and Ave (IPCA) and at the Technological University of the Shannon (TUS).

Scientific Area: Electrical Engineering, Electronic Engineering, Biomedical Engineering, Informatic Engineering, or similar areas.

Admission Requirements:

- Master in the areas of Electrical Engineering, Electronic Engineering, Biomedical Engineering, Informatic Engineering or in areas considered to be related, and enrolled in doctoral programmes at the Technological University of Shannon (TUS).

Eligibility of candidates: The following are eligible for the award of scholarships financed directly or indirectly by the IPCA:

- a. National citizens or citizens of other member states of the European Union;
- b. Third-country citizens;
- c. Stateless candidate;
- d. Beneficiaries of political refugee status.

For scholarships whose work plan runs, in whole or in part, in foreign institutions, only candidates who prove that they are permanently and habitually resident in Portugal are eligible on the date of the start of the scholarship.

Work plan: This project is part of the Pact for Health and aims to develop new technological solutions with application in the medical field.

Objectives of the work plan: The HfFP - Health From Portugal project aims at developing new technological solutions with application in the health area. The candidates will develop innovative methods and/or technologies for application in the area of the diagnosis of pathologies, rehabilitation procedures, training and learning, clinical treatment and follow-up of patients. The focus on tools for the digitalisation of health content will also be studied in this project. The applicant integrated in the PhD_HP_2AiPRR_1 fellowship will focus on the development of technology-based strategies for the diagnosis of urological pathologies. The applicant integrated in the PhD_HP_2AiPRR_2 will focus on the development of a technological solution to support rehabilitation procedures. The applicant integrated in the PhD_HP_2AiPRR_3 will focus on the development of new technologies to support diagnosis, intervention and follow-up of urologic procedures. The applicant integrated in the PhD_HP_2AiPRR_4 will focus on the development of a technological solution to support the diagnosis, rehabilitation and intervention of clinical procedures.

The results of these work plans should be translated into the writing of a PhD thesis.

Applicable legislation and regulations: the Research Fellowship Statute, approved by Law No. 40/2004 of 18 August, in the current wording published by Decree-Law No. 123/2019 of 28 August; Regulation of

Research Grants of the Polytechnic Institute of Cávado and Ave, Regulation No. 821/2020 (Diário da República No. 191/2020, Series II of 2020- 09-30).

R&D unit and supervision: The Work Plan will be developed in the Laboratory of Applied Artificial Intelligence (2Ai), R&D unit of the School of Technology of the Polytechnic Institute of Cávado and Ave, under the scientific guidance of Professor Doctor João Luís Araújo Martins Vilaça of 2Ai of the School of Technology of the Polytechnic Institute of Cávado and Ave, Professor Doutor Pedro André Gonçalves Morais do 2Ai from the Technology School of the Polytechnic Institute of Cávado and Ave, and by Professor Doutor Patrick Murray, from the Technological University of the Shannon for the scholarships with reference number PhD_HP_2AiPRR_1 and PhD_HP_2AiPRR_2; Under the scientific supervision of Professor João Luís Araújo Martins Vilaça, of the 2Ai of the Escola Superior de Tecnologia do Instituto Politécnico do Cávado e Ave, Professor Pedro André Gonçalves Morais, of the 2Ai of the Escola Superior de Tecnologia do Instituto Politécnico do Cávado e Ave, and by Professor Siobhan Moane, of the Technological University of the Shannon for the scholarship with reference number PhD_HP_2AiPRR_3; and under the scientific supervision of Professor João Luís Araújo Martins Vilaça, from the 2ndAi of the Technology School of the Polytechnic Institute of Cávado and Ave, Professor Pedro André Gonçalves Morais, from the 2ndAi of the Technology School of the Polytechnic Institute of Cávado and Ave, and by Professor John Cosgrove, from the Technological University of the Shannon for the scholarship with reference number PhD_HP_2AiPRR_4.

Scholarship duration: the grant will have a duration of 1 (one) year, starting in June 2023, possibly renewable, after a positive evaluation and not exceeding the maximum duration of the project, which is expected to end on 31/12/2025 and the maximum duration of the grant (4 years: students enrolled in a PhD).

Monthly maintenance allowance: the amount of the grant corresponds to a monthly maintenance allowance of € 1 199,64, according to the table of values of grants awarded directly by FCT (https://www.fct.pt/wp-content/uploads/2023/02/Tabela-de-Valores-SMM_2023.pdf), and according to the table in Annex III of the Regulations for Research Grants of the Polytechnic Institute of Cávado and Ave, according to the update authorized for the year 2023. This amount will be paid monthly by bank transfer.

Other benefits:

- Reimbursement of Voluntary Social Insurance, corresponding to the 1st step of the contributory base, and Personal Accident Insurance.
- Scholarship holders may also apply for an allowance for complementary training activities for a maximum period of six months in the total duration of the grant (including renewals), with the payment of a single travel allowance, to be granted upon a positive opinion from the supervisor, under the terms of the table attached to the present regulations (Annex III of the IPCA research grants regulations).
- Installation subsidy for stays equal or longer than six consecutive months, of a pre-established value, according to the table attached to the present regulation (Annex III of the IPCA's Research Grants Regulations);
- The Scholarship holders may receive a one-off subsidy for participation in scientific meetings or missions, according to the table attached to the present regulation (Annex III of the IPCA's regulation of research grants);
- Scholarship holders must annually submit a report on the development of their PhD to the coordinator and scientific supervisor of the Project.

Members of the Jury:

President:

- Professor Doctor João Luis Araújo Martins Vilaça of the School of Technology of the Polytechnic Institute of Cávado e Ave and Coordinator of 2AI.

Effective Members:

- Professor Doctor Pedro André Gonçalves Morais, of the School of Technology of the Polytechnic Institute of Cávado e Ave
- Professor Doctor José Henrique de Araújo Silveira de Brito of the School of Technology of the Polytechnic Institute of Cávado e Ave.

Substitute members:

- Professor Doctor Siobhan Moane da Technological University of the Shannon.
- Professor Doctor Duarte Filipe Oliveira Duque of the School of Technology of the Polytechnic Institute of Cávado e Ave.

Evaluation and selection criteria and procedures: the evaluation of the applications will focus on the candidate's merit, applying the following evaluation criteria, valued on a scale of 0 to 20:

Merit of the candidate - MC (100%):

Applications considered admissible will be scored on a scale of 0 to 20 in each of the following evaluation factors:

Factor A – Curricular evaluation (AC), with a weight of 50%;

Subfactor A1 - Classification obtained in the master's degree plus a degree, weighing 70%;

Subfactor A2 - Related scientific and / or professional experience, weighing 30%;

Factor B - Interview (Ent), weighing 45%:

Subfactor B1 - Motivation and interest in the place, with a weight of 20%;

Subfactor B2 - Capacity for expression, argumentation and verbal fluency, weighing 20%;

Subfactor B3 - Posture and experience of team work, weighing 20%;

Subfactor B4 - Compatibility with the work plan profile, weighing 20%;

Subfactor B5 - Proven command of the English language, weighing 20%;

Factor C - Motivation Letter (CM), weighing 5%:

The interview has a maximum duration of 30 minutes.

For the purposes of deciding on the award of scholarships, applicants will be ranked according to the weighted average of the classification obtained in each of the three factors, translated by the following formula:

$$\text{Final Classification (CF)} = (A \times 0.50) + (B \times 0.45) + (C \times 0.05)$$

For tie-breaking purposes, the ranking of candidates will be performed based on the ratings assigned to each of the evaluation criteria in the following order of precedence: factor A followed by factor B and factor C. Next, the following order of precedence for the sub-criteria, namely: A1, A2, B4, B5, B1, B3, B2, C. As a last resort, it will be the responsibility of the jury president to untie the candidates.

Ranking of candidates: the classification of each candidate is obtained by the average of the ratings of each of the elements of the Jury.

In the event of a tie, the decision of the tiebreaker will rest with the President of the Selection Jury.

Based on the CF, the candidates in the first 4 positions will be selected for the award of this scholarship.

In the event of non-acceptance of the vacancy by one of the serial candidates, the members of the Jury reserve the right to contact the serial candidates in the following positions, in order of ranking, for the award of this scholarship.

Publication of results: The assessment results project, at each stage, duly substantiated in the minutes, will be sent to candidates by email, within 60 working days after the deadline for submission of applications.

If the result is unfavorable to the granting of the requested scholarship, candidates have a period of 10 working days to comment, if they wish, in the context of a prior hearing with interested parties, under the terms of article 121 and 122 of the Administrative Procedure Code (DL nº 4 / 2015 of January 7).

Candidates participation and decision: the Final Ordering List Project is notified to candidates, by email with receipt of delivery of the notification, to comment for the purpose of holding the hearing of

interested parties, under the terms of article 121 and following of the Administrative Procedure Code. In the absence of allegations by the candidates, the final ordering project is considered automatically approved.

Submission of applications: the tender is open 10 working days after publication on the website <https://euraxess.ec.europa.eu>.

Applications and supporting documents for the application provided for in this Notice must be submitted by email to ailaboratory@ipca.pt. In the subject of the e-mail it is mandatory to put the reference of the scholarship to which you are applying. If the scholarship reference is not indicated in the subject of the e-mail, the candidate will be automatically excluded from the procedure.

When submitting the application, the candidate must formally formalize by sending (via email) the following documents in PDF format:

- Certificates of qualification of the academic degree of Master and Bachelor, specifying mandatorily the final classification*;
- Curriculum vitae (<https://cienciavitae.pt/>);
- Letter of motivation.
- At least 1 letter of recommendation.
- Document proving enrollment in the current academic year - PhD **;

* The presentation of the certificate of qualification of the academic degree of Master and Bachelor, when it has been awarded by foreign higher education institutions, can be dispensed in the application/submission phase, being replaced by the candidate's declaration of honor, being obligatory the presentation of the document of recognition of foreign degree and diploma in the process of contracting the scholarship. In situations of divergence between the information contained in the declaration and the documentation delivered for the purpose of contracting the scholarship, only the information contained in the latter will be considered. If it is found that 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 16 August, do not correspond to the classifications attributed in the evaluation of the academic path and may, consequently, changing the candidate's ranking, the scholarship will not be contracted.

** Only at the time of contracting is it mandatory to present the document proving enrollment in the PhD Programmes of the Technological University of Shannon (TUS).

It is optional for the candidate to present any other documents that he considers relevant for consideration by the Selection Jury.

The application and all associated documents, including letters of motivation and recommendation, must be written in Portuguese or in English. The absence of any mandatory document, required when submitting the application, is a reason for exclusion from this contest. And, applications sent by other means will not be admitted.

It is mandatory for the candidate to present his / her application by the submission deadline set in this announcement. The submission of the application after the deadline set in this announcement is a reason for not being eligible for this call.

The Selection Jury has the power to require any candidate, in case of doubt, to present supporting documents for their statements.

False statements made by candidates will be punished under the law.

Complaint: Complaints from the final ordering list, duly ratified, may be made to the IPCA president, to be submitted within 15 working days from the notification, to the email [direcao_est@ipca.pt.](mailto:direcao_est@ipca.pt), which does not have a suspensive effect.

Non-discrimination and equal access policy: The IPCA actively promotes a policy of non-discrimination and equal access, so that no candidate can be privileged, benefited, harmed or deprived any right or exemption from any duty due, in particular, to ancestry, age, sex, sexual orientation, marital status, family status, economic status, origin or social status, genetic heritage, reduced work capacity, disability, illness chronicle, nationality, ethnic or race origin, territory of origin, language, religion, political or ideological convictions and union membership.

Barcelos, 31 de maio de 2023

A Presidente do Instituto Politécnico do Cávado e do Ave

Professora Doutora Maria José Fernandes

ANEXO I

Modelos

Modelo do Relatório Final de Apreciação do Programa de Bolsa a elaborar pelo Bolseiro

Identificação do bolseiro:

Identificação da bolsa, do projeto e entidade de acolhimento:

Orientador científico da bolsa:

1. Objeto e objetivos da bolsa

[De acordo com o tipo de bolsa, anúncio e plano de atividades]

2. Trabalhos desenvolvidos

[Apresentação cronológica das atividades desenvolvidas, incluindo listagem das publicações e trabalhos elaborados no âmbito do contrato de bolsa com os respetivos endereços URL, bem como cópia do respetivo trabalho final, no caso de bolsa concedida para obtenção de grau ou diploma académico].

3. Resultados

[Descrição sucinta dos resultados alcançados e eventuais desvios]

4. Apresentação dos resultados alcançados

5. Autoavaliação e avaliação do programa de bolsa

[Análise crítica do trabalho desenvolvido, conhecimentos adquiridos e avaliação geral – positiva ou negativa – do desempenho e do programa de bolsa]

Nota: Anexos a apresentar em formato eletrónico: Publicações e Trabalhos elaborados no âmbito do Contrato de Bolsa e cópia do Trabalho Final apresentado, no caso de Bolsa concedida para a obtenção de grau ou diploma académico. Em caso de bolsa de participação em reuniões científicas anexar comprovativo de presença na reunião.

Barcelos, ___ de _____ de 20__

O Bolseiro de Investigação, _____ (nome completo)

Modelo de Relatório Final de Avaliação da Atividade do Bolseiro de Investigação Científica a elaborar pelo Orientador Científico

Orientador científico da bolsa:

Identificação da bolsa, do projeto e entidade de acolhimento:

Bolseiro:

1. Análise crítica das atividades e do trabalho desenvolvidos pelo bolseiro

[Breve descrição das atividades desenvolvidas pelo bolseiro, de acordo com o anúncio e o plano de atividades e apreciação crítica dos objetivos e resultados atingidos pelo bolseiro.]

2. Avaliação final do trabalho desenvolvido pelo bolseiro

[Apreciação global fundamentada do trabalho desenvolvido pelo bolseiro, com balanço final positivo ou negativo, abordando o seu desempenho, esforço e dedicação]

Barcelos, ___ de _____ de 20__

O Orientador Científico da Bolsa, _____ (nome completo)

ANEXO II

Contrato de Bolsa de Investigação

ENTRE:

PRIMEIRO: INSTITUTO POLITÉCNICO DO CÁVADO E DO AVE, pessoa coletiva número 503 494 933, com sede na avenida Professor Doutor João Carvalho, Campus do IPCA, 4750-810 Barcelos, representado neste ato pelo sua Presidente, ____, adiante designado por **Primeiro Outorgante**

e

SEGUNDO: ____, de nacionalidade __, nascido a __-__-____, portador do ____ (Cartão de Cidadão/Bilhete de Identidade/Passaporte/Outro) n.o _____, válido até __-__-____, contribuinte fiscal n.º _____, residente na ____, adiante designado por **Segundo Outorgante**,

É celebrado de boa-fé e reciprocamente aceite o presente contrato de **bolsa** de investigação ao abrigo do Estatuto do Bolseiro de Investigação, aprovado pela Lei n.º 40/2004, de 18 de agosto, na sua redação atual, e do Regulamento de Bolsas de Investigação do IPCA, que se rege pelas cláusulas seguintes:

CLÁUSULA 1.ª – O **Primeiro Outorgante** compromete-se a conceder ao **Segundo Outorgante** uma bolsa de ____ (indicar e caracterizar o tipo de bolsa e sua referência) no âmbito do projeto “ ____ ” (indicar a referência e o título do projeto em que se insere, se for o caso) financiada por _____, pelo período de ____ (indicar meses ou dias, consoante o caso), ____ (eventualmente renovável OU não renovável), com início em __-__-____.

CLÁUSULA 2.ª – 1. O **Segundo Outorgante** obriga-se a desenvolver os trabalhos constantes do plano de atividades anexo ao presente contrato de bolsa, cujo conteúdo declara ter tomado conhecimento integral e aceitar sem reservas a partir da data de início do presente contrato.

2. O desempenho de funções pelo **Segundo Outorgante** a título de bolseiro é efetuado em regime de dedicação exclusiva nos termos previstos no artigo 5.o do Estatuto do Bolseiro de Investigação.

3. O **Segundo Outorgante** realiza os trabalhos no _____, sito em __, que funciona como entidade de acolhimento, tendo como Orientador Científico ____ (nome e instituição).

CLÁUSULA 3.ª - Ao **Segundo Outorgante** são reconhecidos os direitos previstos na lei, de acordo com a sua situação, nomeadamente nos artigos 9.º a 11.º do Estatuto do Bolseiro de Investigação, no(s) regulamento(s) aplicável(eis) e no presente contrato.

CLÁUSULA 4.ª - O **Segundo Outorgante** obriga-se a cumprir os deveres, aplicáveis à sua situação, previstos na lei, nomeadamente no artigo 12.º do Estatuto do Bolseiro e Investigação, no(s) regulamento(s) aplicável(eis) e no presente contrato.

CLÁUSULA 5.ª– 1. O montante do subsídio mensal de manutenção é de € __, __, (__), a liquidar mensalmente, através de cheque ou transferência bancária.

2. O **Segundo Outorgante** beneficia também de um seguro de acidentes pessoais durante o período de concessão da bolsa, de cujas condições declara ter tomado conhecimento e aceitar sem reservas.

2. Acrescem ainda as seguintes componentes de bolsa _____ (indicar se aplicável).

CLÁUSULA 6.ª – 1. O presente contrato não gera qualquer relação de natureza jurídico-laboral nem de prestação de serviços, não adquirindo o bolseiro a qualidade de trabalhador em funções públicas. 2. Não são devidos subsídios de alimentação, natal, férias ou quaisquer outros não previstos no Estatuto do Bolseiro de Investigação, no(s) regulamento(s) aplicável(eis) e no presente contrato.

CLÁUSULA 7.ª – 1. Ao presente contrato aplica-se o Estatuto do Bolseiro de Investigação e o Regulamento Bolsas de Investigação do IPCA, do qual o bolseiro declara ter tomado conhecimento. 2. Os casos omissos serão decididos pelo Presidente do IPCA, ouvido o Orientador científico.

CLÁUSULA 8.ª – São causas de cessação do contrato as previstas no Estatuto do Bolseiro de Investigação e no Regulamento Bolsas de Investigação do IPCA

As partes declaram estar de acordo com o clausulado neste contrato, que é feito em duplicado, ambas as vias valendo como originais, ficando um exemplar na posse de cada um dos Outorgantes.

Barcelos, __ de _____ de _____.

O Primeiro Outorgante,

O Segundo Outorgante,

