

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

Title: Announcement for two (2) Research Scholarships for Students Enrolled in Doctoral Programmes (BIED)

Reference: THERAPEASE-IPCA-EST-2AI-BIED-1-2

Number of positions: 2

Project: TherapEase: Rehabilitation therapy at ease

The Applied Artificial Intelligence Laboratory (2Ai), an R&D unit of the School of Technology (EST) of the Polytechnic Institute of Cávado and Ave (IPCA), open a call for two (2) Research Grants for Students Enrolled in Doctoral Programmes (BIED), within the scope of the project 'TherapEase: Rehabilitation therapy at ease', which aims to develop a telerehabilitation platform incorporating Artificial Intelligence and computer vision, with reference COMPETE2030-FEDER-01204500 (Notice MPr-2023-7 | Incentive System for Research and Development - Corporate R&D - Co-promoted Operations), funded by the Competitiveness and Internationalisation Operational Programme (COMPETE 2030), through the European Regional Development Fund (ERDF) and Portugal 2030.

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).

Scientific Area:

- Electrical Engineering, Electronic Engineering, Biomedical Engineering, Computer Engineering or similar areas.

Admission Requirements:

- Candidates must have a Bachelor's degree and a Master's or Integrated Master's degree in Electrical Engineering, Electronic Engineering, Biomedical Engineering, Computer Engineering or similar areas.

- Candidates must be enrolled, or meet the requirements for enrolment, in a doctoral programme at the Polytechnic Institute of Cávado and Ave.

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.

Work Plan:

- The 'TherapEase: Rehabilitation therapy at ease' project aims to develop an agnostic and robust telerehabilitation platform. Candidates will develop innovative methods and/or technologies for application in diagnostic analysis, rehabilitation procedures, and patient follow-up. The candidate will be involved in the development of Artificial Intelligence and computer vision methods for telerehabilitation. The candidate included in the grant with reference THERAPEASE-IPCA-EST-2AI-BD-1 will focus on the development of computer vision technologies. The candidate included in the grant with reference THERAPEASE-IPCA-EST-2AI-BD-2 will focus on the development of an intelligent assistant for exercise support. The results of these work plans should be translated into the writing of a doctoral thesis.

Legislation:

- Research Fellowship Statute – Decree-Law No. 89/2013, which was later amended by Decree-Law No. 123/2019, of 28 August. Current scholarship holder statute: <https://diariodarepublica.pt/dr/legislacao-consolidada/lei/2004-58216179>.
- Regulation of Research Grants of the Polytechnic Institute of Cávado and Ave, Regulation approved by the Order n.º 12952/2023 (Diário da República n.º 242/2023, Série II de 2023-12-18).

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 Doctor Helena Daniela Ribeiro Torres of 2Ai of the School of Technology of the Polytechnic Institute of Cávado and Ave.

Scholarship duration:

- the grant will have a duration of 1 (one) year, starting in January 2025, possibly renewable, after a positive evaluation and not exceeding the maximum duration of the project, which is expected to end on 30/11/2027 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 € 1309,64, according to the table of values of grants awarded directly by FCT (https://www.fct.pt/wp-content/uploads/2024/02/Tabela-de-Valores-SMM_atualizacao-2024.pdf), and according to the table in Annex IV of the Regulation of Research Grants of the Polytechnic Institute of Cávado and Ave, updated in accordance with

paragraph 8 of Article 26 of the IPCA Regulation. This amount will be paid monthly by bank transfer. 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.
- Each year, scholarship holders must submit a report on the development of their doctorate to the coordinator and scientific supervisor of the project.

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 55%;

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 40%:

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:

$$\textbf{Final Classification (CF)} = (A \times 0.55) + (B \times 0.4) + (C \times 0.05)$$

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 2 positions will be selected for the award of this scholarship, if the Selection Jury considers that it has the appropriate profile.

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. The Jury reserves the right not to award the scholarship if candidates with an appropriate profile are not presented for the competition.

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).

Members of the Jury:

President:

- Auxiliar Researcher Helena Daniela Ribeiro Torres, of the School of the School of Technology of the Polytechnic Institute of Cávado e Ave.

Effective Members:

- Professor Doctor João Luis Araújo Martins Vilaça of the School of the School of Technology of the Polytechnic Institute of Cávado e Ave and Coordinator of 2AI.
- Auxiliar Researcher Pedro André Gonçalves Morais, of the School of the School of Technology of the Polytechnic Institute of Cávado e Ave.

Substitute members:

- Professor Doctor Duarte Filipe Oliveira Duque of the School of the School of Technology of the Polytechnic Institute of Cávado e Ave.
- Professor Doctor Estela Maria dos Santos Ramos Vilhena of the School of the School of Technology of the Polytechnic Institute of Cávado e Ave.

Stakeholder participation and decision:

Candidates will be notified of the assessment results project by email with delivery receipt of the notification, so that they can comment for the purpose of holding a hearing of interested parties, pursuant to article 121 et seq. of the Code of Administrative Procedure, to the email candidatura_2ai_est@ipca.pt. In the absence of a response from the candidates, the project becomes definitive.

Decision:

Once the prior hearing period has elapsed, or the issues raised within this scope have been considered, the jury draws up the final ranking list of the admitted candidates, submitting it, together with the remaining parts of the procedure, for approval by the IPCA President.

Form of advertising/notification of results:

The results of the evaluation will be publicized, through a list sorted by the final grade obtained, and the candidates will be notified by email, with delivery receipt of the notification, pursuant to article 19, paragraph 1, of the Research Grants Regulation of the Polytechnic Institute of Cávado and Ave.

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 candidatura_2ai_est@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 Bachelor and Master, specifying mandatorily the final classification;
- Curriculum vitae (<https://cienciavitae.pt/>);
- Letter of motivation.
- At least 1 letter of recommendation.
- Proof of enrolment for the current academic year in an IPCA doctoral programme) **

* The presentation of the certificate of qualification of the academic degree of bachelor and Master, 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.

** At the time of contracting, it is compulsory to present proof of enrolment from the Polytechnic Institute of Cávado and Ave, and the candidate must attach a declaration of honour in the application stating that he/she meets the requirements for enrolment in the doctoral programme, under penalty of exclusion.

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 direccao_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, 22 de janeiro de 2025

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)

ANEXO II

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 III

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. **3.** O Segundo outorgante beneficiará, ainda, do seguro social voluntário correspondente ao primeiro escalão, caso opte pela sua atribuição e desde que cumpra as condições legalmente previstas, comprometendo-se a entregar, até 10 dias úteis após o prazo de limite de pagamento, no serviço competente, o original do comprovativo de pagamento do Seguro Social Voluntário, sob pena de, esgotado aquele prazo, poder não ser reembolsado o valor em questão.

4. 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,