

CALL FOR APPLICATIONS: RESEARCHER

Job/position/grant:

Job reference: AE2024-0463 (HfPT - CBER)

INESC TEC - Instituto de Engenharia de Sistemas e Computadores, Tecnologia e Ciência

Job/position/grant: RESEARCHER

City: Porto

Research field: Main: COMPUTER SCIENCE

Sub: Computer Systems

Job summary:

INESC TEC is accepting applications for 1 RESEARCHER job in the Biomedical Engineering

Project: Health from Portugal Scientific Advisor: Francesco Renna

Duration of the from 2024-12-16 to 2025-12-15, eventually renewable.

contract:

Location: INESC TEC, Porto, Portugal

Job description:

Work Area: Biomedical Engineering

Project overview: Research new multimodal deep learning solutions for the classification of heart sound and electrocardiogram signals. Design and implement explainable artificial intelligence algorithms for analyzing data collected with a multimodal stethoscope. Collaborate with clinical partners in the collection and organization of a database. Contribute to the writing of scientific articles, patent proposals, and reports. **Objectives:** Design, implementation, and integration into prototypes of algorithms for classifying heart sound and electrocardiogram signals collected with a multimodal stethoscope. Develop methods for data collection. Compare the performance of the proposed models with existing solutions; Collaborate in writing articles and preparing project proposals.

Academic Qualifications: MSc in Data Science, artificial intelligence, biomedical engineering, or related.

Minimum profile required: Experience in phonocardiogram and electrocardiogram analysis.

Preference factors: Experience in deep learning for biomedical signal analysis; Experience in explainable AI; publications in the

field of phonocardiogram and electrocardiogram processing.

Funding Entity: HfPT funded by IAPMEI with reference 41 Co-financed by Component 5 - Capitalization and Business

Innovation, integrated in the Resilience Dimension of the Recovery and Resilience Plan within the scope of the Recovery and Resilience Mechanism (MRR) of the European Union (EU), framed in the Next Generation EU,

for the period 2021 - 2026.

Type of contract: fixed-term contract

The hiring shall be governed by what is stipulated in the legislation in force regarding fixed-term employment contracts and by INESC TEC

norms.

Selection criteria: The selection of the candidates will be based on the following criteria, in descending order of consideration:

a) Relevant Curriculum in the concerned field of this tender

b) Proven experience.

Disability Incentive: Candidates who present a degree of disability equal to or greater than 90% will benefit from an incentive (20) in

the score of the CV Assessment.

Candidates who present a degree of disability equal to or greater than 60% and less than 90% will also benefit

from an incentive (10) in the score of the CV Assessment.

Said score may, in these cases, exceed 100 points.

Candidates must demonstrate the degree of disability during the application, namely through the submission of

the Multi-Purpose Medical Certificate of Disability, issued in accordance with Decree-Law no. 202/96, of

October 23 - currently in effect.

Candidates must declare, in the application form, the type of disability used throughout the selection process,

in order to proceed with the required adaptations.









Selection Jury: President of the Jury: Francesco Renna;

Member: Miguel Coimbra;

Member: Susana Cristina Rodrigues;

Notification of results: The results of the selection process will be sent to the interested by electronic mail.

Application period: From 2024-11-07 to 2024-11-20

Application submission: Electronic form filling in www.inesctec.pt in the section Work with Us





