# CALL FOR APPLICATIONS: RESEARCHER

## Job/position/grant:

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| **Job reference:** | AE2022-0290 ( RHAQ - CBER ) |
| | INESC TEC - Instituto de Engenharia de Sistemas e Computadores, Tecnologia e Ciência |
| **Job/position/grant:** | RESEARCHER |
| **City:** | Porto |
| **Research field:** | Main: ENGINEERING,COMPUTER SCIENCE,TECHNOLOGY |
| | Sub: |

## Job summary:

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| **INESC TEC is accepting applications for 1 RESEARCHER job in the Biomedical Engineering** | |
| **Project:** | Contratação de Recursos Humanos Altamente Qualificados |
| **Scientific Advisor:** | Duarte Filipe Dias |
| **Start Date:** | 2022-10-26 |
| **Location:** | INESC TEC, Porto, Portugal |

## Job description:

**Work Area:** Biomedical Engineering

**Project overview:** The selected candidate will integrate the Biomedical Engineering research team at C-BER in a transversal way, supporting in several research activities related to the development of new models of biomedical signal processing as well as the extraction of characteristics and their classification in the scope of pathology and symptoms under study. The candidate will work on various physiological signals such as electrocardiogram, electromyogram, phonocardiogram, inertial data, among others, with the objective of supporting the collection and analysis of these data together with the research team and the clinical staff involved. In this way, it becomes an attractive opportunity for any biomedical engineer as it will allow them to be close to clinical practice for the development of new digital tools to support the screening, diagnosis and monitoring of diseases. The writing of scientific articles and participation in scientific conferences will also be part of activities carried out by the candidate for scientific dissemination of the results obtained.

**Objectives:** The candidate will use innovative technologies that are being developed at C-BER to increase their knowledge and evolve the work that has been done in the area of new techniques for extracting characteristics from various biomedical signals, as well as in the design, implementation and optimization of classifiers based on Machine Learning oriented biomedical engineering problems. The candidate will also support the development of web&mobile applications for integration of the work performed as well as demonstration and use in clinical practice.

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| **Academic Qualifications:** | Master's degree in biomedical engineering, electrical engineering and computers or other similar areas. |
| **Minimum profile required:** | The candidate must have good knowledge in the analysis and processing of biomedical signals, development of machine learning algorithms (kNN, SVM, PCA, among others) and must already have some previous experience in contacting with medical teams in the field of biomedical engineering. |
| **Preference factors:** | Good knowledge of biomedical signal processing techniques for feature extraction. Prior knowledge of digital systems in Parkinson's disease. Previous activity in the analysis of electrocardiogram, electromyogram and inertial data signals. |

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| **Funding Entity:** | CCDRN financed by the Northern Regional Operational Program, through the European Social Fund and the Social Security Budget on the scope of the project NORTE-06-3559-FSE-000116. |
| **Type of contract:** | Uncertain term contract |

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

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| **Selection criteria:** | The selection of the candidates will be based on the following criteria, in descending order of consideration:<br>a) Relevant Curriculum in the concerned field of this tender<br>b) Proven experience. |
| **Selection Jury:** | President of the Jury: Prof. João Paulo Cunha;<br>Member: Prof. Miguel Velhote Correia;<br>Member: Prof. Miguel Coimbra; |
| **Notification of results:** | The results of the selection process will be sent to the interested by electronic mail. |
| **Application period:** | From 2022-09-07 to 2022-10-06 |
| **Application submission:** | Electronic form filling in www.inesctec.pt in the section Work with Us |

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