CALL FOR APPLICATIONS: RESEARCHER

Job/position/grant:

Job reference:	AE2023-0237 (SMARTgNOSTICS - CEGI)
	INESC TEC - Instituto de Engenharia de Sistemas e Computadores, Tecnologia e Ciï¿½ncia
Job/position/grant:	RESEARCHER
City:	Porto
Research field:	Main: ENGINEERING
	Sub: Industrial engineering

Job summary:

INESC TEC is accepting applications for 1 RESEARCHER job in the Advanced Analytics para um dispositivo de monitorização do ar	
Project:	Global Testing & Diagnostics Solutions for antimicrobial resistances
Scientific Advisor:	Luís Guimarães
Start Date:	2023-08-01
Location:	INESC TEC, Porto, Portugal

Job description:

Work Area: Advanced Analytics para um dispositivo de monitorização do ar

Project overview: The scope of the Smartgnostics project includes the development of an air monitoring device (artificial nose) for the detection and identification of bacteria in the environment (PPS2). This device will allow the monitoring of bacteria circulating in the hospital environment (operating theatres, recovery rooms of surgeries among others) allowing preventive actions related to the development of infections as well as aid to diagnosis and treatment when an infection occurs. The development of PPS2 begins with the conceptual design of the device and molecular testing for the detection of bacteria. This includes building the beta prototype, testing for specificity (inclusivity and exclusivity) and detection limits, and matrix validation. To increase the potential of this device a data integration platform will be developed, with capabilities in analytics and machine learning. This work focuses on the development and validation with the device.

Objectives: The work towards the development and validation of the analytics platform will have the following objectives: - Identification and definition of platform requirements (technical and functional); - Definition of the different analytics use cases; - Development of descriptive analytical models; - Development of predictive analytics models; - Validation of the developed models based on synthetic data; - Validation of the developed models based on real data; - Productization of models in the cloud.

Academic Qualifications:	Master's degree in Industrial Engineering and Management or similar.
Minimum profile required:	Minimum 16 marks in the master's degree.
Preference factors:	Past experience with predictive models, scientific publications, participation in R&D projects.

Funding Entity:	SMARTgNOSTICS funded by IAPMEI with reference 5 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:	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.

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.
Selection Jury:	President of the Jury: Prof. Luís Guimarães; Member: Prof. Armando Leitão; Member: Prof. Gonçalo Reis Figueira;
Notification of results:	The results of the selection process will be sent to the interested by electronic mail.
Application period:	From 2023-06-29 to 2023-07-12
Application submission:	Electronic form filling in www.inesctec.pt in the section Work with Us