INESCTEC

CALL FOR APPLICATIONS: Technical Specialist

Job/position/grant:

Job reference:	AE2021-0297 (FIRE_RES-1 - CBER)
	INESC TEC - Instituto de Engenharia de Sistemas e Computadores, Tecnologia e Ciência
Job/position/grant:	Technical Specialist
City:	Porto
Research field:	Main: COMPUTER SCIENCE
	Sub:

Job summary:

INESC TEC is accepting applications for 1 job in the Wearable devices with physiological and environmental sensors. Development of hardware and low-level firmware.	
Project:	Innovative Technologies and Socio-Ecological-Economic Solutions for FIRE RESilient Territories in Europe
Scientific Advisor:	Duarte Filipe Dias
Duration of the contract:	from 2022-02-01 to 2023-01-31
Location:	INESC TEC, Porto, Portugal

Job description:

Work Area: Wearable devices with physiological and environmental sensors. Development of hardware and low-level firmware.

Project overview: Study of the systems that are already under development at C-BER for subsequent definition of a development and production roadmap. This development will be on both hardware (CAD design) and firmware (MCU programming IDEs) areas using also Bluetooth Low Energy (BLE) technology. There will be interactions with end users during this process to adapt the systems to the usage conditions. Preparation of a follow-up production of several units for field tests.

Objectives: The new European project of which INESC TEC is part (FIRE-RES) will allow the improvement and development of innovative solutions for monitoring firefighters. This work aims to develop wearable devices and specific sensors for use in firefighting as well as test them on the field and integrate them into a more comprehensive monitoring system under the FIRE-RES project. After the development phase a production of these devices will be prepared and made to perform a larger scale pilot.

Academic Qualifications:	Master's degree in embedded systems engineering, electrical and computer engineering, biomedical, or other similar areas.
Minimum profile required:	Prior knowledge in hardware design (Altium, Eagle,...) and experience in analog and digital electronics. Proven low-level firmware development on Microcontrollers and sensor integration.
Preference factors:	Familiarity with Altium CAD software and IDEs from Microchip and Silicon Labs. Good knowledge of biomedical and environmental signals and sensors. Knowledge of wearable devices with textile integration.

Funding Entity:	funded by CE, project (reference 101037419)
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.
Selection Jury:	President of the Jury: Prof. João Paulo Cunha;
	Member: Prof. Miguel Velhote Correia;
	Member: Prof. Duarte Filipe Dias;
Notification of results:	The results of the selection process will be sent to the interested by electronic mail.
Application period:	From 2021-12-15 to 2022-01-09
Application submission:	Electronic form filling in www.inesctec.pt in the section Work with Us