

CALL FOR APPLICATIONS: RESEARCHER

Job/position/grant:

Job reference:	AE2024-0235 (ATE - CPES) INESC TEC - Instituto de Engenharia de Sistemas e Computadores, Tecnologia e Ciência
Job/position/grant:	RESEARCHER
City:	Porto
Research field:	Main: ENGINEERING Sub: Electrical engineering

Job summary:

INESC TEC is accepting applications for 1 RESEARCHER job in the Power Systems	
Project:	Alliance for Energy Transition
Scientific Advisor:	Justino Miguel Rodrigues
Start Date:	2024-08-15
Location:	INESC TEC, Porto, Portugal

Job description:

Work Area: Power Systems
Project overview: We are looking for an Embedded Systems Software Developer to join the Smart grid and electric vehicle laboratory (SGEVL). The professional will be responsible for specifying, implementing, and testing software for embedded systems, including programming microcontrollers to control the convertor system developed in the laboratory, he will work on hardware and software integration, ensuring the reliability and efficiency of the developed systems.
Objectives: - Develop and implement software solutions for embedded systems, focusing on efficiency and scalability; Program and debug microcontrollers for various applications; Integrate hardware and software, ensuring optimal compatibility and performance of the systems; Collaborate with other engineering teams to ensure that developed solutions meet project specifications and requirements.

Academic Qualifications:	Bacharel or Master electrical and computer engineering; electronics; power electronics; energy systems; other related
Minimum profile required:	- Experience in embedded systems, programming microcontrollers such as Raspberry Pi and MCUs from Texas Instruments and STM. - Proficiency in programming languages such as C, C++, and Python. - Knowledge of common communication protocols in embedded systems, such as I2C, SPI, UART, and CAN. - Experience with development and debugging tools. - Familiarity with real-time operating systems (RTOS) and firmware development.
Preference factors:	- Experience with communication standards for electric vehicles such as OCPP and ISO15118. - Experience in IoT (Internet of Things) projects and integration of sensors and actuators. - Knowledge of PCB design and experience with CAD tools for hardware design. - Fluency in English (written and spoken).

Funding Entity:	ATE funded by IAPMEI with reference 56 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.
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: Justino Miguel Rodrigues; Member: David Emanuel Rua; Member: Ricardo Jorge Bessa;
Notification of results:	The results of the selection process will be sent to the interested by electronic mail.
Application period:	From 2024-06-27 to 2024-07-27
Application submission:	Electronic form filling in www.inesctec.pt in the section Work with Us