

CALL FOR APPLICATIONS: RESEARCHER

Job/position/grant:

Job reference:	AE2023-0473 (NEXUS - 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 Energy transition in ports

Project:	Innovation Pact - Digital and Green Transition
Scientific Advisor:	Tiago André Soares
Start Date:	2024-02-01
Location:	INESC TEC, Porto, Portugal

Job description:

Work Area: Energy transition in ports

Project overview: -Studies and modelling of energy management systems in ports; - Analysis of the integration of distributed energy resources in the electrical network of the ports; - Studies of the technical operation of the electrical network of the ports; - development of energy management and dispatch tools in ports, including their integration into the NEXUS platform; - Simulation, testing and validation of the developed models; - Writing technical documentation of activities.

Objectives: - Detailed study of future energy management and operation of the electrical network in the port;

- Design and development of an efficient energy management module for the port;
- Programming and support in the integration of energy management and grid operation modules on the NEXUS platform, through the development of APIs;
- Writing a scientific report on activities, as well as scientific papers.

Academic Qualifications:	Bachelor or Master electrical and computer engineering or related areas
Minimum profile required:	- Advanced knowledge in the development of algorithms for automatic control and optimization of energy systems; - Knowledge of programming languages; - Fluency in English (written and spoken);
Preference factors:	- Experience in developing algorithms for optimization and control of energy management systems; - Experience in the Python programming language. - Knowledge in API development; - Knowledge of backend and frontend programming.

Funding Entity:	NEXUS funded by IAPMEI with reference 53 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: Tiago André Soares; Member: Zenaida Mourão; Member: David Emanuel Rua;
Notification of results:	The results of the selection process will be sent to the interested by electronic mail.
Application period:	From 2023-12-07 to 2024-01-05
Application submission:	Electronic form filling in www.inesctec.pt in the section Work with Us