CALL FOR APPLICATIONS: RESEARCHER

Job/position/grant:

Job reference:	AE2024-0528 (CPES-Geral - CPES)
	INESC TEC - Instituto de Engenharia de Sistemas e Computadores, Tecnologia e Ciência
Job/position/grant:	RESEARCHER
City:	Porto
Research field:	Main: COMPUTER SCIENCE
	Sub:

Job summary:

INESC TEC is accepting applications for 1 RESEARCHER job in the Power Systems

Scientific Advisor:	Ricardo Jorge Bessa
Start Date:	2025-01-28
Location:	INESC TEC, Porto, Portugal

Job description:

Work Area: Power Systems

Project overview: The researcher's work is framed within the activities of applying artificial intelligence (AI) to support the energy transition in critical infrastructures (e.g., the power grid). The activities will focus on the control and prediction of the operation of power grids and energy communities, considering aspects such as interpretability, robustness, and resilience of AI-based systems. Another objective is to develop new approaches for cooperation between humans and AI, exploring paradigms such as supervised and reinforcement learning.

Objectives: - Development and application of artificial intelligence algorithms for different use cases in the energy sector, e.g., control of power grids and distributed energy resources

- Development of techniques to evaluate the quality and robustness of AI-based systems

- Designing systems for synergy between human operators and artificial intelligence

- Testing and demonstration in a real-world environment

Academic Qualifications:	Master in electrical and computer engineering; informatics; computer science; applied mathematics; other related
Minimum profile required:	- Basic knowledge of machine learning;
	- Advanced knowledge of a programming language applied to data science (e.g., Python, R).
Preference factors:	- Advanced knowledge of electrical power systems;
	- Experience in developing algorithms based on reinforcement learning;
	- Fluency in English (spoken and written)

Funding Entity:

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: Ricardo Jorge Bessa;
	Member: Jorge Correia Pereira;
	Member: Manuel Matos;
	Substitute member: Carla Silva Gonçalves;
Notification of results:	The results of the selection process will be sent to the interested by electronic mail.
Application period:	From 2024-12-12 to 2025-01-12
Application submission:	Electronic form filling in www.inesctec.pt in the section Work with Us