CALL FOR APPLICATIONS: RESEARCHER

Job/position/grant:

Job reference:	AE2025-0318 (CRIIS-Geral - CRIIS)
	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 Industrial Robotics	
Scientific Advisor:	Luís Freitas Rocha
Duration of the contract:	from 2025-09-01 to 2026-08-31, eventually renewable.
Location:	INESC TEC, Porto, Portugal

Job description:

Work Area: Industrial Robotics

Project overview: The objectives of this work plan are essentially focused on designing collaborative robotics systems, centered on the human operator, capable of assisting them in performing multiple complex tasks, with the ability to evolve and adapt to new objects/products over time. To this end, the objectives are: • Study computer vision solutions applicable to industrial robots. • Explore artificial intelligence tools, including Deep Learning and Generative AI. • Implement and test the different selected methods, with a view to their application. • Design modular software that allows a robotic manipulator to perform tasks such as handling, inspection, and/or (dis)assembly of products, enabling the robot to generalize its behavior to new products. • Develop quick configuration interfaces so that non-specialized operators can easily configure the system. • Create training materials on the topic, with the aim of meeting training needs and promoting the actual adoption of these solutions by the companies in the sector involved in the project.

Objectives: Development and research of collaborative industrial robotics solutions with computer vision for complex industrial operations.

Academic Qualifications:	Master's Degree in Electrical and Computer Engineering, or Computer Engineering.
Minimum profile required:	Experience in industrial robotics, computer vision, and AI systems. Knowledge of the ROS framework, Yolo and TensorFlow libraries, and the ONNX ecosystem. Proficiency in C++ and Python programming languages.
Preference factors:	Experience generating synthetic data sets for training AI models and applying them to robotics. Relevant experience programming industrial robots from Universal Robot and Kuka.

Funding Entity:	
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.
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: Luís Freitas Rocha;
	Member: Marcelo Petry;
	Member: Manuel Santos Silva;
	Substitute member: João Pedro Souza;
Notification of results:	The results of the selection process will be sent to the interested by electronic mail.
Application period:	From 2025-07-28 to 2025-08-08
Application submission:	Electronic form filling in www.inesctec.pt in the section Work with Us