

CALL FOR APPLICATIONS: RESEARCHER

Job/position/grant:

Job reference:	AE2022-0406 (Drivolution - CRAS) 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 2 RESEARCHER job in the Robotics

Project:	Agenda Drivolution
Scientific Advisor:	André Dias
Start Date:	2023-01-23
Location:	INESC TEC, Porto, Portugal

Job description:

Work Area: Robotics

Project overview: - Conduct a survey of requirements for the development of a UAV for the indoor scenario; - Development of indoor navigation algorithms using SLAM techniques combining tags (TAGs) and Dead Reckoning techniques; - Development of a sensory payload that can be integrated into the developed prototype; - Implement the navigation algorithms in the ROS framework. - Carry out preliminary flight tests with the developed UAV; - Exercise a critical spirit in evaluating the research process and the results obtained.

Objectives: The Drivolution project within the scope of the PRR will address the integration of drones in the warehouse digitalization process through the development of a framework that allows commercial and non-commercial drones to be equipped with the ability to perceive and navigate and that can contribute to optimizing warehouse processes. logistical pipeline of a warehouse. The proposed solution will allow the use of drones in indoor and outdoor scenarios, addressing the optimization of logistical processes.

Academic Qualifications:	Master in electrical engineering, information technology, bioengineering or related field.
Minimum profile required:	Master in Electrical Engineering.
Preference factors:	Previous experience in exploring indoor navigation techniques using SLAM methods. Previous knowledge in using the DJI framework. Deep knowledge of using the ROS framework. Proven experience in the development of robotic platforms in terms of hardware and software. Participation in scientific projects, and writing of scientific documents.

Funding Entity:	Drivolution funded by IAPMEI, 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: Prof. André Dias; Member: Prof. Hugo Miguel Silva; Member: Prof. Diana Viegas;
Notification of results:	The results of the selection process will be sent to the interested by electronic mail.
Application period:	From 2022-12-14 to 2023-01-03
Application submission:	Electronic form filling in www.inesctec.pt in the section Work with Us