

## CALL FOR APPLICATIONS: RESEARCHER

### Job/position/grant:

<b>Job reference:</b>	AE2023-0069 ( GreenAuto - CRIIS ) INESC TEC - Instituto de Engenharia de Sistemas e Computadores, Tecnologia e Ciência
<b>Job/position/grant:</b>	RESEARCHER
<b>City:</b>	Porto
<b>Research field:</b>	Main: ENGINEERING Sub: Electrical engineering

### Job summary:

#### INESC TEC is accepting applications for 1 RESEARCHER job in the Mobile Robotics

<b>Project:</b>	GreenAuto: Green innovation for the Automotive Industry
<b>Scientific Advisor:</b>	António Paulo Moreira
<b>Start Date:</b>	2023-04-01
<b>Location:</b>	INESC TEC, Porto, Portugal

### Job description:

**Work Area:** Mobile Robotics

**Project overview:** The navigation system for an industrial autonomous mobile robot to operate in the shopfloor would benefit extensively from an adaptive accuracy depending on the circumstances. If the robot is moving around obstacles or docking high localization accuracy is required (and markers are not always possible to be used) but if the space around is less demanding the requirements should be adapted for the maximum efficiency. This work will be focused on the development of a navigation system that (1) compatible with multiples sensing systems (2) adaptable to the environment, by dynamically and automatically selecting or merging (by fusion) the localization estimates, following the requirements of the local context. The final objective is the development of algorithms that improve efficiency and robustness of the navigation system of a mobile robot with limited resources in non-structured environments.

**Objectives:** The main objective is the development of robust navigation systems for mobile robots. In particular the development of long term simultaneous localization and mapping systems to provide robots with resilience to highly dynamic environments.

<b>Academic Qualifications:</b>	Master in Electrical and Computer Engineering or similar.
<b>Minimum profile required:</b>	Knowledge of mobile robotics, in particular Localization and SLAM; Experience in ROS and in mobile robot development.
<b>Preference factors:</b>	Knowledge on ROS. Previous experience in Simultaneous Localization and Mapping.

**Funding Entity:** GreenAuto funded by IAPMEI with reference 54 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. António Paulo Moreira;  
Member: Prof. Manuel Santos Silva;  
Member: Prof. Germano Veiga;

**Notification of results:** The results of the selection process will be sent to the interested by electronic mail.

**Application period:** From 2023-02-15 to 2023-02-28

**Application submission:** Electronic form filling in [www.inesctec.pt](http://www.inesctec.pt) in the section [Work with Us](#)