INESC TEC | Research Initiation Grant (AE2024-0329)
INESC TEC

Job Title	INESC TEC	Research Initiation Grant (AE2024-0329)
Department	CRIIS
Institution	INESC TEC
	PORTO, , Portugal
Date Posted	Aug. 8, 2024
Application Deadline	Aug. 14, 2024
Position Start Date	Aug. 1, 2024
Job Categories	Graduate Student
	Graduate Student
Academic Field(s)	Engineering - Other
	Engineering - Other
Apply Online Here	https://www.inesctec.pt/en/form/notice/5016
Apply By Email	
Job Description	

Research Opportunity

Autonomous Robotics

Work description

1. Literature review / survey of the state of the art in the area of ??robot simulation;
2. Familiarization with the NVIDIA Ominiverse platform;

INESC TEC | Research Initiation Grant (AE2024-0329)
INESC TEC

3. Modeling of robots and scenes in OpenUSD;
4. Simulation of collaborative robots in NVIDIA Isaac Sim;
5. Integration with manipulation (NVIDIA Isaac Manipulator) and perception (NVIDIA Isaac Perceptor) workflows;
6. Testing of AI models related to robotic learning of new tasks, trajectory planning algorithms, and human-machine collaboration;
7. Analysis and optimization of robot performance in different simulated scenarios;

Academic Qualifications

Degree in Electrical and Computer Engineering, Computer Engineering, or related fields.

Minimum profile required

Enrolment in a Master's degree in Electrical and Computer Engineering, Computer Engineering, or related areas.

The work to be developed during this scholarship will have a large component of software implementation using object-oriented programming languages.

Familiarity with various sensors, as well as with the fundamental principles of robotics, is important.

The award of the scholarship assumes that the candidate is a student of a cycle of studies or a non-degree course, taught at a Higher Education Institution.

Preference factors

Programming knowledge in C/C++ and Python Knowledge of ROS

Maintenance stipend: € 601,12, according to the table of monthly maintenance stipend for FCT grants , paid via bank transfer. Grant holders may be awarded potential supplements, according to a quarterly evaluation process (Articles 19, 21 and 22 of the Regulations for Grants of INESC TEC and

Annex II), up to a maximum limit of 50% of the monthly maintenance stipend.

INESC TEC supports costs with registration, enrolment or tuition fees, during the grant duration, under the terms established in the internal document: "Payment of Tuition fees to grant holders".

The grant holder will benefit from health insurance, supported by INESC TEC.

Application Period

Since 01 Aug 2024 to 14 Aug 2024

Centre

Robotics in Industry and Intelligent Systems

Scientific Advisor

Marcelo Petry

What we offer

- **Multicultural and collaborative environment**
- A multicultural, international and collaborative environment that makes it easier to exchange ideas, work in networks and create synergies.
- **International projects**
- The possibility of working in international projects with some of the most important companies in the field.
- **Mentoring**
- Mentoring with the best researchers in the fields of electrical and industrial engineering, bioengineering, information technology and physics.

INESC TEC | Research Initiation Grant (AE2024-0329)
INESC TEC

- **Self Improvement**
- The possibility of participating in international conferences, workshops, seminars and vocational training.
- **Other Benefits and Perks**
- Flexible working time, health insurance, discounts in hotels, transportation, etc.
- **Informal Events**
- Annual informal events, such as the multicultural party.

For more information: Click Here

Contact Information

Please reference Academickeys in your cover letter when applying for or inquiring about this job announcement.

Contact

Portugal

Contact E-mail   rh@inesctec.pt