

## Scientific Initiation Studentships

Applications are open for 6 Scientific Initiation Studentships, within the framework of project Aero.Next (1801P.01227.1.01 Aero next – 00000066 contrato N.º 31 – IST-ID), funded by PRR (Plano de Recuperação e Resiliência), through IAPMEI – Agência para a Competitividade e Inovação, under the following conditions:

**Scientific Area:** Automation, Control, and Robotics

### Admission Requirements:

- a) *To be enrolled at a professional higher technical course, at a bachelor degree, at an integrated master or master degree, or to have a bachelor degree and be enrolled at a course that does not award an academic degree and it is integrated in the educational project of a higher education institution, performed in association or cooperation with one or several R&D units;*
- b) *not to exceed with this contract, including the possible renovations, an accumulated period of one year in this type of studentship, continuously or with interruptions;*
- c) *not to have held any other fellowship directly or indirectly funded by FCT.*

**Workplan:** The grants aim at the development of scientific research initiation activities in the following topics:

1. development of multi-modal teleoperation interfaces for the teleoperation of planetary rovers, with focus on the participation in analog missions (1 grant)
2. development of localization, system identification, and control, for free-flyer robots, with focus on experimentation using the Space CoBot prototype (3 grants)
3. target tracking based on active vision for an UAV: development of a active vision based system for a multicopter to track a pedestrian (1 grant)
4. multi-robot cooperative system for mapping and exploration: design and implementation of a strategy for cooperative exploration by a team of small aerial robots to explore and map unknown environments (1 grant)

**Legislation and Regulations:** Statute of Scientific Research Fellow, approved by Law nr. 40/2004, of August 18, as worded by Decree-Law nr. 123/2019, of August 28; FCT Regulation for Research Studentships and Fellowships, available on <https://www.fct.pt/apoios/bolsas/docs/RegulamentoBolsasFCT2019.pdf> and <https://dre.pt/application/file/a/127230968>.

**Workplace:** The work will be developed at the Institute for Systems and Robotics of Instituto Superior Técnico, under the scientific supervision of Prof. Rodrigo Ventura and Dr. Meysam Basiri (depending on the grant)

**Duration:** The research fellowship(s) will have the duration of 6 months. It's expected to begin in May of 2024, and may be eventually renewed up to the maximum of 12 months, including the duration of the initial contract.

**Monthly maintenance allowance:** According to the values for Research Fellowships awarded by FCT in Portugal ([https://www.fct.pt/wp-content/uploads/2024/02/Tabela-de-Valores-SMM\\_atualizacao-2024.pdf](https://www.fct.pt/wp-content/uploads/2024/02/Tabela-de-Valores-SMM_atualizacao-2024.pdf)), the amount of the monthly maintenance allowance is 601,12€, being the payment method an option of the Fellow by Wire Transfer/Check.

**Selection methods:** The selection methods will be the following: *Curriculum evaluation*, with the respective weight of 100%.

**Composition of the selection Jury:** Prof. Rodrigo Ventura, Dr. Meysam Basiri, e Prof. Pedro U. Lima

**Announcement/ notification of the results:** The final evaluation results will be communicated to all applicants by email.

**Deadlines and procedures of complaint and appeal.** A complaint may be lodged from the final decision within 15 working days, or an appeal to the Executive Board of IST-ID within 30 working days, both counted from the respective notification

**Application deadline and formalization:** The call is open from April 15 until April 26, 2024.

It is mandatory to formalize applications with the submission of the following documents: i) B1 Form – Fellowship application (<https://ist-id.pt/concursos/bolsas/>); ii) *Curriculum Vitae*; iii) academic degree certificate, where applicable; iv) proof of enrollment at an academic degree course or at a course that does not award an academic degree; v) motivation letter; vi) declaration on honour that the applicant does not exceed with this contract, including the possible renovations, an accumulated period of one year in this type of studentship, continuously or with interruptions, and has not held any other fellowship directly or indirectly funded by FCT.

Applications must be submitted to the email: [rodrigo.ventura@isr.tecnico.ulisboa.pt](mailto:rodrigo.ventura@isr.tecnico.ulisboa.pt)