

(BL321/2024-IST-ID)

Scientific Initiation Studentships

Applications are open for 3 Scientific Initiation Studentships, within the framework of project/R&D institution I&D NEURASPACE - Contrato 00009 - IST-ID, 1801P.01239.1.01, financed by IAPMEI - AGÊNCIA PARA A COMPETITIVIDADE E INOVAÇÃO under the following conditions:

Scientific Area: Automation, Control and Robotics

Admission Requirements: *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;*

Workplan: One of the goals of the AI Fights Space Debris project is the development of digital tools for satellite modeling. In the context of the project, this work aims to improve existing tools and develop new tools for modeling small satellites in low orbits. The following tasks stand out:

- T1: Learning the principles of satellite engineering, taking ISTSat-1 as an example;
- T2: Development of software for simulating the operation of a small satellite;
- T3: Development of localization, system identification, and control methods for the free-flyer robot, focusing on experimentation using the Space CoBot prototype.

Each of these tasks will be assigned to one, and only one of the three grants.

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; IST-ID Research Fellowships Regulation, available on https://ist-id.pt/files/sites/43/regulamento-de-bolsas-da-ist_id-2.pdf.

Workplace: The work will be developed at Institute for Systems and Robotics and Nanosatlab of IST, under the scientific supervision of Professor Rodrigo Ventura and Doctor João Paulo Monteiro.

Duration: The research fellowship(s) will have the duration of 6 months. It's expected to begin in February 2025, and may be eventually renewed up to the maximum of 12 months, including the duration of the initial contract.

Monthly maintenance allowance: the amount of the monthly maintenance allowance is € 601,12, being the payment method by Wire Transfer.

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

Composition of the selection Jury: Professor Rodrigo Ventura; Doutor João Paulo Monteiro; Professor João Miguel Raposo Sanches

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, or an appeal to the Executive Board of IST-ID, within 15 working days counted from the respective notification.

Application deadline and formalization: The call is open from January 21 until February 3, 2025.

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;



Applications must be submitted to <https://welcome.isr.tecnico.ulisboa.pt/opportunities/>