

(BL93/2024-IST-ID)

Research Studentships for Master or Integrated Master students

Applications are open for 1 Research Studentship, within the framework of project/R&D institution Neuraspace, (NEURASPACE - Contrato 00009 - IST-ID), financed by national funds through PRR (Planos de Recuperação e Resiliência, through IAPMEI -Agência para a Competitividade e Inovação, under the following conditions:

Scientific Area: Aerospace

Admission Requirements: *To be enrolled at an integrated master or a master.*

Workplan: As the exploitation of space increases and the number of active satellites continues to grow exponentially, the risk of collisions in Earth's orbit poses a significant threat to the sustainability of future space endeavours and the integrity of critical infrastructure. With this in mind, the Neuraspace PRR project aims at developing a platform that is capable of suggesting manoeuvres to avoid possible collisions in orbit. We are looking for highly motivated candidates for Master thesis to address the following challenge in the context of this project: How to leverage state of the art global optimization methods to determine optimal solutions for collision avoidance maneuver problem, in a time efficient and scalable to a large population of space objects.

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 (ISR) and at the Scientific Area of Applied Mechanics and Aerospace (ACMAA) and Robotics of Instituto Superior Técnico, under the scientific supervision of Prof. Rodrigo Ventura, Prof. Paulo Gil, and João Paulo Monteiro.

Duration: The research fellowship(s) will have the duration of 6 months. It's expected to begin in May 2024, and may be eventually renewed up to the maximum of 24 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), the amount of the monthly maintenance allowance is €990,98, being the payment method an option of the Fellow 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: Prof. Rodrigo Ventura, Prof. Paulo Gil, and 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 (Master, Integrated Master); v) motivation letter;

Applications must be submitted to the email: rodrigo.ventura@isr.tecnico.ulisboa.pt