(BL82/2026-IST-ID)

Research Studentships (for students of a course that does not award an academic degree)

Applications are open for 1 Research Studentship, within the framework of project 1801P.01669, 2024.16782.PEX – ARTOp.Inclusive with cost center CC931101 financed by national funds through FCT/MCTES (PIDDAC, under the following conditions:

Scientific Area: Electrical Engineering, Electronics and Computer Engineering

Admission Requirements:

a) to hold a bachelor or master 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 two years in this type of studentship, continuously or with interruptions.

Workplan:

Task 1 – The research fellow will design, develop, and iterate physical interaction mockups based on interaction requirements gathered through interviews with people with upper limb limitations and from the state of the art. The goal of these initial mockups is to explore different designs of interaction methods that meet the defined requirements, followed by validation with people with upper limb limitations through a participatory design process. The mockups will be based on the accessible gamepad Flex Controller and the Tobii Eye Tracker 5. By the end of this stage, a set of physical interaction mockups is expected, along with a list identifying which mockups were selected by people with upper limb limitations and what improvements are needed.

Task 2 – The research fellow will design, develop, and iterate GUI (graphical user interface) mockups based on interaction requirements gathered through interviews with people with upper limb limitations and from the state of the art. The objective of these mockups is to explore possible ways to adapt an assistive teleoperation system according to the needs of people with upper limb limitations. For example, how the assistive system can be activated and how it can suggest support measures for teleoperation. The mockups will be based on the GUI of the MEROP teleoperation system. By the end of this stage, a set of GUI mockups is expected, along with a list identifying which mockups were selected by people with upper limb limitations and what improvements are needed.

Task 3 – The research fellow will develop a functional prototype of adaptive interaction for the teleoperation system, based on the mockups created in Tasks 1 and 2. The prototype will allow users to remotely control the robot and decide the level of assistance they want while performing a task. It may also automatically identify and activate assistive support when such a need is detected. Subsequently, a user study with people with upper limb limitations is planned to validate the prototype.

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://dre.pt/application/file/a/127230968 .

Workplace: The work will be carried out at ITI/LARSyS and ISR Lisbon of Instituto Superior Técnico, University of Lisbon, under the scientific supervision of Dr. Jéssica Corujeira.

Duration: The research fellowship will have the duration of 12 months. It's expected to begin in June of 2026, and the contract is not renewable.

Monthly maintenance allowance: According to the values for Research Fellowships awarded by FCT in Portugal (https://www.fct.pt/fct-atualizou-o-valor-das-bolsas-para-2026/), the amount of the monthly maintenance allowance is €1359,64, being the payment method an option of the Fellow by Wire Transfer/Check.

Selection methods: The selection methods will be the following: The selection methods to be used will be as follows: curricular evaluation, with 7 points assigned, and individual interview via videoconference, with 3 points assigned. The elements to be considered in the curricular evaluation will be the following: a) academic qualifications in Human-Computer Interaction, weighting of 50%; b) academic qualifications in Robotics, weighting of 20%; c) master's dissertation, weighting of 20%; d) extracurricular activities, weighting of 10%.

Composition of the selection Jury: Professor Hugo Nicolau; Professor Rodrigo Ventura; Professor Jéssica Corujeira

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 May 15 until May 28, 2026.

It is mandatory to formalize applications with the submission of the following documents: i) B1 Form – Fellowship application (https://ist-id.pt/recursos-humanos/bolseiros/#documentos-relacionados); ii) *Curriculum Vitae*; iii) academic degree certificate, where applicable; iv) proof of enrollment 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 an accumulated period of two years in this type of studentship, continuously or with interruptions.

Applications must be submitted to the email*:* jessica.corujeira@tecnico.ulisboa.pt