

(BL93/2025\_IST-ID)

## 1 Research Studentship for PhD students

Applications are open for 1 Research Studentship for PhD Students, within the framework of project Responsible.AI (Contrato nº 12 - IST-ID) financed by national funds PRR (Plano de Recuperação e Resiliência), through IAPMEI - Agência para a Competitividade e Inovação, under the following conditions:

**Scientific Area:** Electrical, Computer and Information Engineering

**Admission Requirements:** To be enrolled at a PhD, at the starting date of the grant contract.

**Workplan:** Natural human-robot interaction is becoming a key requisite of autonomous robots. Part of that consists of the robot being able to receive commands in natural language, translate them into a plan composed of feasible actions and execute the plan. This thesis goal is to implement an end-to-end pipeline based on foundation models, such as Visual Language Models (VLMs), Large Reasoning Models (LRMs) or Visual Language Models (VLA) that take as input multimodal prompts (commands expressed verbally, by gestures, speech or other means) and the robot context, and outputs a task plan to be executed by the robot.

**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 Regulation of Scientific Research Fellowships, available on <https://ist-id.pt/recursos-humanos/bolseiros/#documentos-relacionados>.

**Workplace:** The work will be developed at Institute for Systems and Robotics / LARSyS of Instituto Superior Técnico, under the scientific supervision of Professor Pedro Manuel Urbano de Almeida Lima.

**Duration:** The research fellowship will have the duration of 3 months. It's expected to begin in April 2025, and can be renewed up to the maximum of 48 months, including the duration of the initial contract.

**Monthly maintenance allowance:** the amount of the monthly maintenance allowance is € 1309,64 €, being the payment method by wire transfer.

**Selection methods:** The selection methods will be the following: Curriculum evaluation, namely background in the research area defined in the workplan, with the respective weight of 100%.

**Composition of the selection Jury:** Professors Pedro M. U. A. Lima, José A. R. Santos-Victor; Luis M. M. Custódio.

**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 March 31 until April 11, 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) official academic degree certificate, where applicable;
- iv) proof of enrollment in a doctoral program;
- v) motivation letter.

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

