**(BL73/2025-IST-ID)**

**Research Studentships (Master)**

Applications are open for 1 Research Studentship, within the framework of project/R&D institution IST-ID egamesLab nº26, CC931101, financed by national funds from PRR/IAPMEI.

**Scientific Area:** Electrical Engineering, Electronic Engineering, Information Engineering

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

**Workplan:** The goal is to build a robot animation tool, which involves both hardware and software challenges. The student will plan and conduct the assembly phase, to build the physical prototypes using wood materials, laser cutter, raspberry pi, servo motors, etc. The animation tool consists of two identical robots, each with 2 degrees of freedom (similar to PAPERINO, see: https://arxiv.org/pdf/2207.12544). One of the robots works as a puppet that humans can manipulate to create expressive robotic motions, while the other acts as the final robot replicating the motions produced by the human. After the assembly phase, the student will develop several animation modes: synchrony, mimicry, and mirror. Additional software components will be developed to equip robot animators to easily design, record, reproduce, and analyse robotic motions. Particularly, the motion analysis component will require the implementation of state-of-the algorithms to analyse motions, taking inspiration from other fields or disciplines (e.g. biomechanics). A small pilot experiment is expected by the end of the research grant, in which participants will be invited as robotic animators to use and test the PAPERINO system.

**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 for Research Studentships and Fellowships, available on https://ist-id.pt/recursos-humanos/bolseiros/#documentos-relacionados.

**Workplace:** The work will be developed at the Interactive Technologies Institute of IST-ID, under the scientific supervision of Dr. Filipa Correia.

**Duration:** The research fellowship(s) will have the duration of 9 months. It's expected to begin in April 2025. It is renewable until the end of the project, with the limit of 24 months, including the duration of the initial contract.

**Monthly maintenance allowance:** the amount of the monthly maintenance allowance is €1040,98, being the payment method of the Fellow by wire transfer.

**Selection methods**: The selection methods will be the following: Curriculum evaluation (namely background in the research area defined in the workplan), and motivation letter with the respective weights of 70% and 30%.

**Composition of the selection Jury:** Prof. Filipa Correia, Prof. Daniel Lopes and Prof. Hugo Nicolau.

**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 27 until April 9, 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 (Master, Integrated Master); v) motivation letter;

Applications must be submitted to the email: filipacorreia@tecnico.ulisboa.pt & susana.nobrega@tecnico.ulisboa.pt