

## 1 Research Studentship for a Master student

Applications are open for 1 Research Studentship for a Master Student, 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:** Biomedical Systems and and Biosignals.

**Admission Requirements:** to be enrolled in a Master's programme.

**Workplan:** The scholarship holder will develop an electroencephalogram (EEG) - based Brain-Computer Interface (BCI) for controlled language generation with Pretrained Large Language Models (LLMs), including: training and deployment of deep learning models for classification of EEG patterns of brain activity based on a motor imagery paradigm; implementation of the interface between the BCI and the LLM; and acquisition of proof-of-concept data from healthy controls.

**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; [https://ist-id.pt/files/sites/43/regulamento-de-bolsas-da-ist\\_id-2.pdf](https://ist-id.pt/files/sites/43/regulamento-de-bolsas-da-ist_id-2.pdf).

**Workplace:** The work will be developed at Institute of Systems and Robotics of Instituto Superior Técnico, under the scientific co-supervision of Professor Patricia Figueiredo and Professor Athanasios Vourvopoulos.

**Duration:** The research fellowship will have the duration of 5 months. It is expected to begin in October 2024, and may be eventually renewed up to the maximum of 24 months, including the duration of the initial contract.

**Monthly maintenance allowance:** 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: 1) relevance of academic degree and respective grade (25%); 2) training in advanced machine learning and informatics (25%); 3) motivation letter (25%); e 4) global evaluation by the jury (25%). The jury will interview up to a maximum of three candidates with the highest marks. In order to make a more objective assessment of some of these criteria, the interview will count 50% towards each of the above criteria.

**Composition of the selection Jury:** Professors Patrícia Figueiredo, Athanasios Vourvopoulos, and João 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 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 September 25 until October 8, 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) Proof of enrollment in a MSc program;
- iv) Motivation letter.

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