

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

Applications are open for 1 Research Studentship (for students of a course that does not award an academic degree), 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 Biosignals

Admission Requirements: Master Degree in Biomedical Engineering, Biophysics, or related areas.

a) to hold a 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.

c) Given the nature of the project which is aimed at utilizing cutting-edge technologies, such as Brain-Computer Interfaces (BCI) and Artificial Intelligence (AI), the candidate must have advanced knowledge of programming and prior knowledge in analysis and processing of signals and brain images. Preferred factors: previous experience in neurofeedback, BCI, biomedical signal processing for Electroencephalographic (EEG) signals alongside advanced machine-learning methods and good writing skills in English. Prior experience in the industry will be considered as an advantage.

Workplan: The scholarship holder will acquire and analyze electroencephalographic signals from healthy participants, develop machine learning methods for brain-computer interfacing and neurofeedback applications in assistive technology, interfaced with advanced language models for communication and control of systems targeting patients with neurological disabilities.

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 Institute for Systems and Robotics (ISR-Lisboa) of Instituto Superior Técnico, under the scientific supervision of Professor Athanasios Vourvopoulos and Professor Patricia Figueiredo.

Duration: The research fellowship will have the duration of 12 months. It's expected to begin in **October/2023** and may eventually be renewed.

Monthly maintenance allowance: According to the values for Research Fellowships awarded by FCT in Portugal (https://www.fct.pt/wp-content/uploads/2023/02/Tabela-de-Valores-SMM_2023.pdf), the amount of the monthly maintenance allowance is €1199,64, being the payment method an option of the Fellow by Wire Transfer/Check.

Selection methods: The selection methods will be the following: 1) relevance of academic degree and respective grade (25%); 2) experience in neurofeedback and BCIs (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 Athanasios Vourvopoulos, Patricia Figueiredo 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 13 until September 26, 2023.

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;
- iv) proof of enrollment at a course that does not award an academic degree which must be presented at the time of contract signature;
- 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: athanasios.vourvopoulos@tecnico.ulisboa.pt