

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

Applications are open for 1 Research Studentship, within the framework of project/R&D institution 1801P.01287.1.01 NOISyS, financed by 2022.02283.PTDC, financed by national funds through FCT/MCTES (PIDDAC), under the following conditions:

Scientific Area: Biomedical Systems and Biosignals

Admission Requirements: Master Degree in Computer/Electrical/Biomedical Engineering 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 Virtual Reality (VR), Brain-Computer Interfaces (BCI) and Artificial Intelligence (AI), the candidate must have advanced knowledge of programming. Preferred factors: previous experience in VR development, experience with Unity game engine, alongside with good knowledge of computer graphics and good writing skills in English. Prior experience in neurofeedback or BCI will be considered as an advantage.

Workplan: The scholarship holder will develop Virtual Reality training environments involving brain-computer interfacing and neurofeedback applications for neurorehabilitation, interfaced with advanced machine learning 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 Professora Patricia Figueiredo.

Duration: The research fellowship will have the duration of 12 months. It's expected to begin in **April/2023**. Not renewed.

Monthly maintenance allowance: According to the values for Research Fellowships awarded by FCT in Portugal (https://www.fct.pt/wp-content/uploads/2024/02/Tabela-de-Valores-SMM_atualizacao-2024.pdf), the amount of the monthly maintenance allowance is €1259,64, 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) CV and prior experience in Virtual Reality development (25%); 3) motivation letter (25%); and 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 March 20 until April 3, 2024.

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