

Scientific Initiation Studentships

Applications are open for 3 Scientific Initiation Studentships, within the framework of project 1801P.01516 – OptSurgAI (2024.07248.IACDC), apoiado pela medida “RE-C05-i08.M04 – “Apoiar o lançamento de um programa de projetos de I&D orientado para o desenvolvimento e implementação de sistemas avançados de cibersegurança, inteligência artificial e ciência de dados na administração pública, bem como de um programa de capacitação científica”, do Plano de Recuperação e Resiliência – PRR, enquadrado no contrato de financiamento celebrado entre a Estrutura de Missão Recuperar Portugal (EMRP) e a Fundação para a Ciência e a Tecnologia I.P. (FCT),, under the following conditions:

Scientific Area: Signal Processing and Artificial Intelligence

Admission Requirements:

- a) *To be enrolled at a professional higher technical course, at a bachelor degree, at an integrated master or master degree, or to have a bachelor 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 one year in this type of studentship, continuously or with interruptions;*
- c) *not to have held any other fellowship directly or indirectly funded by FCT.*

Workplan: Research positions are open under the OptSurgAI project which aims to develop AI methodologies for the analysis of surgery videos. Selected candidates will work on the following topics:

- 1) Development of an AI (deep learning) model to predict a patient's post-surgery assessment at 30 days using multimodal data (patient clinical data, radiology data, and surgery video data) – one position.
- 2) Development of an AI (deep learning) model to predict the duration of surgery before and during surgery using multimodal data (patient clinical data, radiology data and surgery video data, up to the time of prediction) – one position.
- 3) Development of an AI-based model for analysing surgery videos so that it learns the surgeon's bimanual patterns during the operation – a position.

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 the VisLAB of the Institute of Systems and Robotics, under the scientific guidance of Professor Catarina Barata

Duration: The scholarship will last 4 months, with an expected start date of July 2025. The scholarship contract may be renewed up to the maximum of 12 months, including the duration of the initial contract. When the academic degree or diploma is awarded during the term of the scholarship contract, the scholarship may be completed under the established contractual terms.



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Monthly maintenance allowance: According to the values for Research Fellowships awarded by FCT in Portugal (<https://www.fct.pt/fct-atualizou-o-valor-das-bolsas-para-2025/>), the amount of the monthly maintenance allowance is € 651,12 being the payment method by Wire Transfer.

Selection methods: The selection methods will be the following: *Curriculum evaluation letter of motivation, with the respective value of 70/30%.*

Composition of the selection Jury: Professor Catarina Barata, Professor José Santos-Victor, Doctor Carlos Santiago

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 June 16 until June 30, 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 or at a course that does not award an academic degree; v) motivation letter; vi) declaration on honour that the applicant does not exceed with this contract, including the possible renovations, an accumulated period of one year in this type of studentship, continuously or with interruptions, and has not held any other fellowship directly or indirectly funded by FCT.

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



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