

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

Applications are open for one Research Studentship for students of a course that does not award an academic degree, within the framework of project AI-Radiologist, reference 1801P.01507.1.01.01 AI-Rad (2024.07344.IACDC), financed by national funds through FCT/MCTES, under the following conditions:

Scientific Area: Artificial Intelligence.

Admission Requirements:

- 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.

Workplan: To develop a prototype-based interpretable classifier and patch-based generative model. The work is divided in two phases: 1) develop a prototype learning strategy that learns the distributions of prototypes for different classes of images, rather than representing each prototype as a fixed point in the latent space, therefore capturing the inherent variability and uncertainty in the features of each class; and 2) implement a generative prototype-conditions model wherein the synthesis of novel images is explicitly conditioned on learned prototypical distributions. The central objective of this methodology is to facilitate the generation of images that integrate composite features from multiple prototypes. By addressing the constraints associated with current single-prototype-based approaches, this technique aims to produce outputs with enhanced semantic richness and diversity.

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 Instituto de Sistemas e Robótica, from Instituto Superior Técnico, under the scientific supervision of Professors Carlos Santiago and Catarina Barata.

Duration: The research fellowship will have a duration of 12 months. It's expected to begin in April and not be 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-2025.pdf), the amount of the monthly maintenance allowance is € 1309.64, being the payment method by Wire Transfer.

Selection methods: Curriculum evaluation (60%) and previous experience on the topics related to the grant (40%). The candidates may be invited for an interview, for additional discrimination between levels of expertise.

Composition of the selection Jury: Carlos Santiago, Catarina Barata and Francisco Calisto.

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 within 30 working days, both 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;
- iv) Motivation letter;
- v) 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.
- vi) proof of enrollment at a course that does not award an academic degree which must be presented at the time of contract signature.



Fundação
para a Ciência
e a Tecnologia

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



Fundação
para a Ciência
e a Tecnologia