## (BL183/2024\_IST-ID)

## 1 Research Studentship (for PhD students)

Applications are open for one Research Studentship for PhD students, within the framework of project MIA-BREAST, reference 2022.04485.PTDC, financed by national funds through FCT/MCTES, under the following conditions:

Scientific Area: Artificial Intelligence.

## **Admission Requirements:**

- Master Degree in Electrotechnical Engineering.
- To be enrolled at a PhD.

**Workplan:** This work aims to develop a learning model for problems where the source and target domains are distinct. Specifically, we want to obtain a model trained in the source domain, where there are classified or annotated examples (images) and test this same model on a target where there are few annotated examples and with a different domain. The learning mechanism to be developed is therefore situated in a context of semi-supervised learning with domain adaptation. This work aims to overcome a difficulty that results from the fact that a model is "dominated" by the source domain and when there are annotations in both domains. State-of-the-art work typically involves two models (classifiers) to solve this problem, however this proposal is innovative since it proposes the use of only one classifier.

**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 <a href="https://www.fct.pt/apoios/bolsas/docs/RegulamentoBolsasFCT2019.pdf">https://www.fct.pt/apoios/bolsas/docs/RegulamentoBolsasFCT2019.pdf</a> and <a href="https://dre.pt/application/file/a/127230968">https://dre.pt/application/file/a/127230968</a>.

**Workplace:** The work will be developed at Institute for Systems and Robotics (ISR-LIsboa) of Instituto Superior Técnico, under the scientific supervision of Professor Jacinto C. Nascimento.

**Duration:** The research fellowship will have a duration of 6 months and may be eventually renewed up to the maximum of 48 months, including the duration of the initial contract. It's expected to begin in August 2024.

Monthly maintenance allowance: According to the values for Research Fellowships awarded by FCT in Portugal (<a href="https://www.fct.pt/wp-content/uploads/2024/02/Tabela-de-Valores-SMM">https://www.fct.pt/wp-content/uploads/2024/02/Tabela-de-Valores-SMM</a> 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**: 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: professors João Paulo Costeira, Manuel Marques, and Jacinto C. Nascimento.

**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 July 24 until August 6, 2024.

It is mandatory to formalize applications with the submission of the following documents:

- i) B1 Form Fellowship application (<a href="https://ist-id.pt/concursos/bolsas/">https://ist-id.pt/concursos/bolsas/</a>);
- ii) Curriculum Vitae;
- iii) official academic degree certificate;
- iv) proof of enrollment in a doctoral program;
- v) motivation letter;

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

