

CALL FOR APPLICATIONS

Job:

Job reference:	AE2019-0288 (AUTOMOTIVE - CTM) INESC TEC - Instituto de Engenharia de Sistemas e Computadores, Tecnologia e Ciência
Position:	Research Grants (BI)
City:	Porto
Research field:	Main: ENGINEERING Sub: Electrical engineering

Job summary:

INESC TEC is accepting applications to award 1 Research Grant for MSC .

Project:	AUTOMatic multiMODal drowsiness detecTion for smart Vehicles
Scientific Advisor:	Ana Filipa Sequeira
Duration Grant:	from 2020-02-01 to 2020-07-31 (6) eventually renewable until the project conclusion or budget.
Location:	INESC TEC, Porto, Portugal

Job description:

Work Area: Image processing and computer vision; pattern recognition

Project overview: In scenarios where face biometric is used, the acquisition is not performed in a highly controlled and cooperative manner, therefore these systems must be robust in dealing with spoofing attacks. The liveness (or presentation attack) detection methods has become a high level concern in biometric security. To address this challenge, deep learning techniques are providing promising results when associated with machine learning tools such as adversarial learning and domain adaptation.

Objectives: The main goals of this work are: i) to become acquainted with the state-of-the-art in face PAD methods addressing the robustness of PAD systems to unseen attacks; ii) to develop an experimental work to compare the performance of systems trained and tested with the same known types of attacks and others that are tested with unseen attacks; and iii) develop techniques that improve the robustness of the PAD systems when facing unseen attacks.

Academic Qualifications:	Master in Electrical and Computers Engineering or Informatics Engineering
Minimum Profile required:	Master in Electrical and Computers Engineering or Informatics Engineering
Preference factors:	Programming skills (Matlab or Python, Image Processing and Pattern Recognition. Motivated for machine learning and biometric recognition.
Monthly Grant:	€989,70 (MSC) according to the Stipends values of the grants awarded directly by the FCT, paid by bank transfer. The grant holder may also benefit from additional incomes in the sequence of a quarterly evaluation process (Clauses 12 and 13 of INESC TEC Grants Regulation and Annex II), up to a maximum of 50% of the monthly grant.

Project duration:	2018-10-01 a 2021-09-30
Funding Entity:	Funded by FEDER through the Operational Programme for Competitiveness and Internationalisation - COMPETE 2020 Programme, and by National Funds through the FCT - Portuguese Foundation for Science and Technology, I.P., within project POCI-01-0145-FEDER-030707 ((PTDC/EEI-EEE/30707/2017) . The grant contract shall be submitted to the legislation concerning the Research Grant Holder Statute , approved by Law n 40/2004, dated 18 August, amended and republished by Decree-Law No. 202/2012 of 27 August and amended by Decree-Law No. 233/2012 of 29 October and by Law No. 12/2013, of January 29, and Decree-Law No. 89/2013 of July 9 as well as by INESC TEC Grant Regulation , approved by FCT - Fundação para a Ciência e a Tecnologia (Science and Technology Foundation) in 12 January 2011 and FCT current Grant Regulation. Additional information about INESC TEC Grants Regulation and relating annexes may be found at www.inesctec.pt/grants

Selection Criteria:	Curriculum evaluation based on the criteria referred to in Clause 7 INESC TEC Grants Regulation and will include individual interviews in the final stage of the selection process, with its valuation: 70% curriculum evaluation (40% CV, 20% scientific domains and 10% Expertise) and 30% interview. Only those candidates who obtain at least 70% in the curricular evaluation (CV + Scientific Domain + Experience) will be called for the interview.
Selection Jury:	President of the Jury: Prof. Ana Filipa Sequeira; Member: Prof. Jaime Cardoso; Member: Prof. Ana Maria Rebelo;
Notification of results:	The results of the selection process will be disseminated to interested parties by mail, as referred to in Clause 8 of INESC TEC Grants Regulation .
Application period:	From 2019-11-18 to 2019-12-31
Application submission:	Fill in the electronic form in the section Work with Us at www.inesctec.pt , attaching the Curriculum Vitae, certificate of qualifications and other supporting documents relevant to the final assessment.