

CALL FOR APPLICATIONS

Job:

Job reference:	AE2019-0005 (CLARE - 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:	Computer-aided cervical cancer screening
Scientific Advisor:	Jaime Cardoso
Duration Grant:	from 2019-03-05 to 2020-03-06 (12) . The grant may be renewed for additional periods up to the maximum duration of the project or the duration of the grant for which the candidate was selected. It can also be renewed due to another project provided that it is entirely or partly related to the work area in the call and that it contributes to the ongoing training.
Location:	INESC TEC, Porto, Portugal

Job description:

Work Area: Machine learning, computer vision

Project overview: The goal of the project is to improve the state-of-the-art in cervical cancer screening and diagnosis, in both cytology and colposcopy procedures, by creating a Computer Aided-Diagnosis system that can be easily integrated in the conventional clinical workflow. We seek candidates to work on machine learning/deep learning and computer vision to automatically analyze the quality of the acquired images and their suitability for diagnosis in automatic systems.

Objectives: 1. Investigate methods for the global image quality assessment of cytological and colposcopic images in cervical cancer screening. 2. Investigate methods for the local image quality assessment of cytological and colposcopic images in cervical cancer screening, highlighting regions with insufficient quality for diagnosis. 3. Evaluate the previous methodologies in real scenarios.

Academic Qualifications:	Master degree in Electrical Engineering or similar
Minimum Profile required:	
Preference factors:	Very good programming skills (C++/Python); good knowledge in deep learning frameworks (pytorch, tensorflow). Experience in image analysis of colposcopic and cytological cervical data.
Monthly Grant:	€980,00 (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:	2018-07-01 a 2021-06-30
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-028857 .
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: 80% curriculum evaluation (40% CV, 20% scientific domains and 20% Expertise) and 20% 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. Jaime Cardoso; Member: Prof. Hélder Filipe Oliveira; Member: Prof. Luís Filipe Teixeira;
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 2019-02-05 to 2019-02-18
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.