

CALL FOR APPLICATIONS

Job:

Job reference:	AE2019-0339 (INESC TEC LA - HASLAB) INESC TEC - Instituto de Engenharia de Sistemas e Computadores, Tecnologia e Ciência
Position:	Research Grants (BI)
City:	HASLab, Dep Informática, UMinho, Braga
Research field:	Main: COMPUTER SCIENCE Sub:

Job summary:

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

Project:	INESC TEC-UID/EEA/50014
Scientific Advisor:	João Alexandre Saraiva
Duration Grant:	from 2020-01-01 to 2020-06-30 (6) eventually renewable.
Location:	HASLab, Dep Informática, UMinho, Braga

Job description:

Work Area: Software Engineering

Project overview: Software testing is a vital part of the software development cycle, due to the detection and correction of bugs. Manually writing test cases is a monotonous and non-trivial task. It is possible to automatically generate said test cases, however this process is not context-sensitive and can generate superfluous or useless test cases. Therefore, an alternative automatic test case generation approach is sought, which can reason about the program and produce real program executions.

Objectives: The researcher will develop an automatic test case generation system which is capable of adapting to the context of the software product, therefore producing tests that resemble what an human developer would produce. This system should be guided by different criteria that change how the test cases are produced, such as performance or energy consumption criteria.

Academic Qualifications:	Integrated Master's Degree in Software Engineering
Minimum Profile required:	Knowledge about software analysis and test techniques; Knowledge about analysis of performance and energy consumption in software; Capacity of Java programming.
Preference factors:	Experience with: analysis and manipulation of Abstract Syntax Trees; RAPL or similar tools; QuickCheck and EvoSuite; Analysis and Test of Software teaching; Notion about the concept of code smells.
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:	-
Funding Entity:	Funded by National Funds through FCT - Portuguese Foundation for Science and Technology, I.P., in the scope of the project INESC TEC-UID/EEA/50014
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 (30% CV, 25% scientific domains and 25% 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. João Alexandre Saraiva; Member: Prof. José Creissac Campos; Member: Prof. Rui Alexandre Pereira;
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 2019-11-26 to 2019-12-09
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.