

## CALL FOR APPLICATIONS

### Job:

<b>Job reference:</b>	AE2019-0276 ( INESC TEC LA - CPES ) INESC TEC - Instituto de Engenharia de Sistemas e Computadores, Tecnologia e Ciência
<b>Position:</b>	Research Grants (BI)
<b>City:</b>	Porto
<b>Research field:</b>	Main: ENGINEERING Sub: Electrical engineering

### Job summary:

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

<b>Project:</b>	INESC TEC-UID/EEA/50014
<b>Scientific Advisor:</b>	José Nuno Fidalgo
<b>Duration Grant:</b>	from 2020-01-01 to 2020-12-31 (12) eventually renewable.
<b>Location:</b>	INESC TEC, Porto, Portugal

### Job description:

**Work Area:** Smart Grids

**Project overview:** The investments of the distribution network can be classified according to your potential contributions for the following veterans: security of supply, technical service qualification, network efficiency, operational efficiency, etc. Planning the development of the distribution network in transitions to smart grids requires coordination of these factors, combining the different vectors in order to optimize the benefit / cost relationship.

**Objectives:** The main goal is to exploit Big Data techniques to: Develop models to estimate technical losses at different voltage levels as a function of investments, forecast demand trends, and general network operating conditions. Identify the portion corresponding to non-technical losses. Test the of practicability of distinguishing losses by voltage level based on energy balances Monetize investment benefits based on avoided losses.

<b>Academic Qualifications:</b>	Master in Electrical Engineering or similar
<b>Minimum Profile required:</b>	Advanced knowledge of electric power systems; Experience with data mining models applied to electrical grids
<b>Preference factors:</b>	Advanced R programming skills; Fluency in Portuguese (spoken and written); Previous experience in modeling technical losses in the power grid
<b>Monthly Grant:</b>	€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.

<b>Project duration:</b>	-
<b>Funding Entity:</b>	Funded by National Funds through FCT - Portuguese Foundation for Science and Technology, I.P., in the scope of the project 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 <a href="#">INESC TEC Grants Regulation</a> and relating annexes may be found at <a href="http://www.inesctec.pt/grants">www.inesctec.pt/grants</a>	

<b>Selection Criteria:</b>	Curriculum evaluation based on the criteria referred to in Clause 7 <a href="#">INESC TEC Grants Regulation</a> and will include individual interviews in the final stage of the selection process, with its valuation: 90% curriculum evaluation (40% CV, 30% scientific domains and 20% Expertise) and 10% interview. Only those candidates who obtain at least 70% in the curricular evaluation (CV + Scientific Domain + Experience) will be called for the interview.
<b>Selection Jury:</b>	President of the Jury: Prof. José Nuno Fidalgo; Member: Prof. João Tomé Saraiva; Member: Prof. Leonel Magalhães Carvalho;
<b>Notification of results:</b>	The results of the selection process will be disseminated to interested parties by mail, as referred to in Clause 8 of <a href="#">INESC TEC Grants Regulation</a> .
<b>Application period:</b>	From 2019-11-18 to 2019-11-29
<b>Application submission:</b>	Fill in the electronic form in the section <a href="#">Work with Us</a> at <a href="http://www.inesctec.pt">www.inesctec.pt</a> , attaching the Curriculum Vitae, certificate of qualifications and other supporting documents relevant to the final assessment.