

## CALL FOR APPLICATIONS

### Job:

<b>Job reference:</b>	AE2016-0360 (DM4Manufacturing-2 - CEGI) 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: Industrial engineering

### Job summary:

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

<b>Project:</b>	DM4Manufacturing: Aligning Manufacturing Decision Making with Advanced Manufacturing Technologies
<b>Scientific Advisor:</b>	Gonçalo Reis Figueira
<b>Duration Grant:</b>	from 2017-01-01 to 2017-12-31 (12) eventually renewable.
<b>Location:</b>	INESC TEC, Porto, Portugal

### Job description:

**Work Area:** Quantitative Methods for Decision Support in Real-Time Operations Management

**Project overview:** Real-time decision-making in production systems requires the integration of the planning, scheduling, and control levels in order to achieve highly competitive operations. Optimal real-time operations have to deal with the data availability from the shop-floor, the uncertainty of the production system, and external issues such as demand variability. This requires dynamic approaches to keep coherency and optimize the decision-making throughout the various interdependent hierarchical planning levels.

**Objectives:** Develop and apply data mining techniques to extract and analyse data in real-time, translating it into useful information to the operations management, as well as optimization methods that use that information. There is also the possibility of framing this work in a PhD project.

<b>Academic Qualifications:</b>	Master degree in Industrial Engineering and Management, Computer Science, or a similar area
<b>Minimum Profile required:</b>	Skills in the area of operations research. Strong interest in solving complex problems. Ability to work in multidisciplinary research projects. Proficiency in English.
<b>Preference factors:</b>	Expertise in production planning and supply chain management, team-work capabilities and proficiency in object-oriented programming languages.
<b>Monthly Grant:</b>	€980,00 (MSC) according to the Stipends values of the grants awarded directly by the FCT, paid by bank transfer. The grant holder can receive additional payments by participating in complementary contracts or projects that contribute to the work plan (Clauses 12 and 13 of INESC TEC Grants Regulation and Annex II), in accordance with paragraph 4 of article 5 of Research Grant Holder Statute, approved by Law nº 40/2004, dated 18 August, up to a maximum of 50% of the monthly grant.

<b>Project duration:</b>	2016-11-01 a 2019-10-31
<b>Funding Entity:</b>	ERDF - European Regional Development Fund through the Operational Programme for Competitiveness and Internationalisation - COMPETE 2020 Programme, and by National Funds through the FCT - Fundação para a Ciência e a Tecnologia (Portuguese Foundation for Science and Technology) within project POCI-01-0145-FEDER-016418.

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](http://www.inesctec.pt/grants)

**Selection Criteria:** Curriculum evaluation based on the criteria referred to in Clause 7º [INESC TEC Grants Regulation](#) and will include individual interviews in the final stage of the selection process, with its valuation: 85% curriculum evaluation (35% CV, 30% scientific domains and 20% Expertise) and 15% interview.

<b>Selection Jury:</b>	President of the Jury: Prof. Pedro Amorim; Permanent Member: Prof. Gonçalo Reis Figueira; Substitute Member: Prof. Luís Guimarães;
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**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 2017-12-14 to 2017-12-27

**Application submission:** Fill in the electronic form in the section [Work with Us](#) at [www.inesctec.pt](http://www.inesctec.pt)