

CALL FOR APPLICATIONS

Job:

Job reference: AE2019-0246 (CrossLOG-1 - CEGI)

INESC TEC - Instituto de Engenharia de Sistemas e Computadores, Tecnologia e Ciência

Position: Post-Doc Grants (BPD)

City: Porto

Research field: Main: ENGINEERING

Sub: Industrial engineering

Job summary:

INESC TEC is accepting applications to award 1 Postdoctoral Grant .

Project: AUTOMATIC MIXED-PALLETIZING FOR CROSS-DOCKING LOGISTICS CENTERS

(POCI-01-0247-FEDER-039895)

Scientific Advisor: António Galrão Ramos

Duration Grant: from 2020-01-01 to 2020-12-31 (12) eventually renewable until the project conclusion or budget.

Location: INESC TEC, Porto, Portugal

Job description:

Work Area: Cutting and Packing Problems

Project overview: Cross Log's main objective is to investigate, study, develop and implement an automated and collaborative cross-docking system (aligned with industry 4.0), capable of moving and managing the flow of products within the warehouse in the fastest and most secure way. In Cross Log, the ability to generate intelligent three-dimensional mosaics is essential to ensure the flexibility, adaptability and productivity of the cross-docking system, while ensuring the stability of the palletized load.

Objectives: Development of the concept and algorithm for the intelligent three-dimensional mosaic generator in near real time considering all the functional requirements of automated loading and transport of pallets with various items. Development of an online three-dimensional mosaic generation software.

Academic Qualifications: PhD in Industrial Engineering and Management or related area.

Minimum Profile required: Relevant scientific CV regarding approaching and solving combinatorial optimisation problems. Proficiency in

English language, in writing and speaking and object-oriented programming languages.

Preference factors: PhD thesis in cutting and packing problems. Published papers in cutting and packing. Experience in the

 $\ \, \text{development and implementation of DSS in industrial context. Proved teamwork capacities. Autonomy.}$

Monthly Grant: €1509,80 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: 2019-11-01 a 2022-10-31

Funding Entity: Fundo Europeu de Desenvolvimento Regional (FEDER) and by the Programa Operacional

Competitividade e Internacionalizao POCI-01-0247-FEDER-039895

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 (30% CV, 25% scientific domains and 15% 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. António Galrão Ramos;

Member: Prof. Elsa Marília Silva; Member: Prof. Sara Sofia Martins:

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 2019-12-10

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.







