

## CALL FOR APPLICATIONS Research Grant (BI-Master) – 3 positions

This call concerns to three (3) research grant positions (BI-master) of the FCT R&D Unit SYSTEC – Research Center for Systems and Technologies – SYSTEC -EEA/00147 - POCI-01-0145-FEDER-006933, funded by FEDER funds through COMPETE2020 - Programa Operacional Competitividade e Internacionalização (POCI) – and by national funds through FCT - Fundação para a Ciência e a Tecnologia I.P.

The Research Center for Systems and Technologies (SYSTEC) hosted at FEUP and ISR – Association sets forth the key goals of:

- i) Pushing forward the state-of-the-art in the areas of systems, control, optimization, estimation, robotics, networked and vehicle systems, and power electronics for transport & energy driven by high impact academic, societal, industrial, and entrepreneurial challenges; and
- ii) Promoting the valorization and transfer of the generated knowledge and products.

The position of this call fall in the general area of Networked Robotic Vehicles and Systems with an emphasis on path planning, guidance, navigation and control of autonomous vehicles, being the associated activities executed in SYSTEC facilities at FEUP, subject to the following conditions:

### Scientific Area:

Systems, Control, Optimization, Estimation, as well as, their application areas in Networked Robotic Vehicle Systems, Advanced Production Systems, Power and Mobility, Health, and Management.

### Admission Requirements:

Master degree in either Electrical Engineering, Applied Mathematics, Informatics, or Computer Sciences.

Candidates with some experience in research, with preference on Big Data Tools, with a good mastery of the English language, as well as solid interpersonal skills and teamwork abilities are preferred.

### R&D work specification:

Key Responsibilities:

- To carry out R&D activities in the assigned goals project associated with both theoretical and practical issues in Networked Robotic Vehicles and Systems, focused on GNC applications.
- To work closely with senior researchers and other colleagues in order to contribute to the advancement of the R&D activities of SYSTEC.
- To generate and display R&D results which contribute to excellence at the worldwide level, and maintain accurate and complete records of all findings.
- To promote the dissemination of the R&D results of his or her activities, and, thus, contribute, to the visibility of SYSTEC and the institutions associated with it.
- To produce R&D and dissemination articles as well as technical reports covering his or her activities in the SYSTEC unit according to its publication and dissemination strategy, as well as the reporting requirements of the pertinent research contracts.
- To collaborate with everyone working on the projects, attend group meetings, project meetings, relevant workshops and conferences as necessary.
- To perform occasional demonstrations of the labs' work to potential students and/or industrial and or academic collaborators.

To observe and comply with all policies and regulations, including the key policies and procedures on Confidentiality, Conflict of Interest, Data Protection, and other Regulations.

### Applicable Legislation and Regulation:

Law n.º. 40/2004 of August 18, modified by the Law-Decree n.º 202/2012, of August 27, and modified by the Law-Decree n.º 233/2012, of October 29 and by the Law n.º 12/2013 of January 29 and by the Law-Decree n.º 89/2013 of July 09 (Statute of the Scientific Research Grantee); Current “Regulamento de Bolsas de

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Investigação da FCT - Fundação para a Ciência e a Tecnologia”, (FCT-Foundation for Science and Technology research grants regulation), ([www.fct.pt/apoios/bolsas/docs/RegulamentoBolsasFCT2018.pdf](http://www.fct.pt/apoios/bolsas/docs/RegulamentoBolsasFCT2018.pdf)), and “Regulamento de Bolsas da Universidade do Porto” (Porto University grants regulation).

**Work Facilities:**

The R&D activities will take place at SYSTEC facilities in the Electrical and Computer Engineering Department of FEUP - Faculdade de Engenharia da Universidade do Porto, under the scientific supervision of an Integrated Member (<https://systec.fe.up.pt/index.php/about-us/people/integrated-members>) of the research unit SYSTEC, coordinated by Professor Fernando Lobo Pereira.

**Duration and Contractual Conditions:**

The R&D activities will be executed in a regimen of exclusivity and will start not earlier than October 2018, for the period of three months renewable but not exceeding the project duration. If it is not possible to conclude the contract for three consecutive months, the scholarship will not be awarded.

**Remuneration:**

The base monthly net income is of € 980.00, as stipulated by FCT for BI grants with master degree (BI-M) in Portugal ([www.fct.pt/apoios/bolsas/valores](http://www.fct.pt/apoios/bolsas/valores)). The payment will be executed via bank transfer.

**Application Grading Method:**

Curricular Analysis

The applications of the candidates will be ranked according to their suitability to fulfill the key responsibilities underlying the R&D work specification:

- (i) Curricular assessment of the candidate which includes the main achievements, the significance and quality of their scientific and technical production, as well as their ability to intervene efficiently and in an innovative manner to address challenges. Grading scale: 0-5
- (ii) Suitability of the candidate profile to the position requirements. Grading scale: 0-5
- (iii) Adequacy of the candidate to the R&D team dynamics. Grading scale: 0-5.

The weights assigned to these criteria are, respectively, 60%, 20% e 20%.

Interview

After the analysis of the submitted documentation, the Candidates Grading Committee request an interview with the two best candidates in order to clarify issues deemed relevant for a fair decision. In this case, the curricular analysis will have the weight of 70% and the interview will have the weight of 30%.

Moreover, the Candidates Grading Committee reserves to itself the right to not hire anyone of candidates in case no candidate fulfils the stated requirements.

**Composition of the Candidates Grading Committee:**

President: Fernando Manuel Ferreira Lobo Pereira

Member: António Pedro Rodrigues Aguiar

Member: João Tasso de Figueiredo Borges de Sousa

Substitute member: Fernando Arménio da Costa Castro e Fontes

Substitute member: Maria do Rosário Marques Fernandes Teixeira de Pinho

**Announcement of the Results:**

The results of the selection process will be sent to the candidates by letter. Candidates therefore need to provide their full postal address in their application documents.

**Period for Submission of the Applications:**

Applications have to be submitted during the period of **07/09/2018 until 24/09/2018**.

The applications have to be submitted by *email* to [recursoshumanos@fe.up.pt](mailto:recursoshumanos@fe.up.pt) and to [sas.isr@fe.up.pt](mailto:sas.isr@fe.up.pt), indicating **(FEUP - SYSTEC – BI-3M)**, with following elements: Letter with the expression of interest and

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motivation, Curriculum Vitæ (including address, e-mail and telephone), at least two reference contacts that can provide reference letters, certification of qualifications, skills and competences, and, also, other documents that the candidate may deem a relevant too her/his application.

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