

Instituto Superior de Engenharia do Politécnico do Porto - ISEP Project SIMOCE (ANI P2020 17690) is recruiting 1 researcher with a BSc degree in Electrical Engineering or similar, to collaborate in the development of Intelligent Engineering Systems. This project is co-funded by Portugal 2020 "Fundo Europeu de Desenvolvimento Regional" (FEDER) through Programa Operacional Regional do Norte (NORTE 2020).

We are looking for researchers with experience in areas such as power and energy systems modelling and simulation, smart grids, distributed energy resources, demand response, data mining techniques, big data, optimization, planning, scheduling, intelligent interaction, ontologies and knowledge representation, affective computing, ubiquitous computing, context awareness, cyber-physical systems and in their application to real world engineering problems. The following conditions are applied to this recruitment process:

## 1. CIENTIFIC AREA

Engineering

2. ACADEMIC DEGREE

BSc degree in Electrical Engineering or similar

# 3. DURATION OF THE GRANT

From December 1st 2017 until February 28th 2018 (03 months duration), eventually to be renewed according to the project execution and respective budget.

# 4. ACTIVITIES AND WORKPLAN:

The candidates to be selected will participate in the project activities.

The work plan involves the following tasks:

- Design and computational development of methods, algorithms, and computational applications, namely in the areas of Power and Energy Systems and Ambient Intelligence, including the use of Artificial Intelligence concepts and techniques;

- Integration and reformulation of existing and developed computational applications;

- Participation in the project scientific activities, namely concerning the development of intelligent engineering systems, involving the required electrical, electronics, and telecommunication infrastructures;

- Preparation and participation in distance and face to face meetings, involving project teams (ISEP, Portuguese partners and international partners), locally or abroad;

- Reports and scientific papers preparation;

- Laboratorial and prototyping activities, including case studies preparation, simulation, and result analysis and presentation;

- Communication and dissemination activities;

- Organization activities.

## 5. LEGISLATION AND REGULATIONS

"Lei nº40/2004, de 18 de Agosto (Estatuto do Bolseiro de Investigação Científica) e Regulamento de Bolsas e Investigação da Fundação para Ciência е Tecnologia а а em vigor (www.fct.pt/apoios/bolsas/docs/RegulamentoBolsasFCT2015.pdf), modified and e republished by Decree-law no. 202/2012, of 27 August and modified by Decree-law no. 233/2012, of October and by Law no. 12/2013, of 29 January; Regulation no. 405/2010, May.6.2010 (published in "Diário da República" no. 88, II Serie, 06.May.2010); "Despacho IPP-P-002-2013 - Regulamento de Bolsas de Projetos"; "Regulamento de Bolsas de Investigação da Fundação para a Ciência e a Tecnologia, I.P. - 2013.

# 6. SUPERVISION AND WORKPLACE

The candidates to be selected will be scientifically supervised by Professor Zita Vale.

The workplace is at GECAD – the Research Group on Intelligent Engineering and Computing for Advanced Innovation and Development in the following address:

Rua Dr. António Bernardino de Almeida, 431 4200-072 Porto – Portugal







Página 1/2 ISEP-DRH-SP-MOD062v00



Instituto Superior de **Engenharia** do Porto

SIMOCE 2017-03

### 7. REMUNERATION

As defined by FCT (€ 745.00/month), according to the table of stipends of the country (available in http://www.fct.pt/apoios/bolsas/valores.phtml.en), paid by bank transfer.

#### 8. CANDIDATE SELECTION METHOLOGY AND EVALUATION PANEL

Only candidates that have presented the complete set of application documents will be admitted. The selection method will take into account the following components: final classification of the BSc (50%), curriculum vitae evaluation (50%). In case of doubts, an interview can be undertaken and it will be conducted in English. In this case, the following elements will be taken into consideration: the final classification of the BSc (30%), the curriculum vitae evaluation (50%), and the interview (20%).

Prof. Zita Maria Almeida do Vale (panel coordinator), Prof. Maria Goreti Carvalho Marreiros and Prof. Isabel Cecília Correia Silva Praça Gomes Pereira. Members of the substitute panel: Prof. Sérgio Filipe Carvalho Ramos and Prof. Carlos Fernando da Silva Ramos.

## 9. RESULTS PUBLICATION AND NOTIFICATION

The candidates will be individually notified by email message on the final evaluation results.

## 10. CANDIDATURE

BSc degree in Electrical Engineering or similar

Minimum profile required: Solid scientific background and relevant research experience in the respective graduation field. Writing and speaking proficiency in English. Good skills for team work. Previous work experience in research activities involving intelligent systems, modelling, simulation, and heuristic optimization. Good programming skills and experience in the development of artificial intelligence based computer applications. Authorship of scientific papers in the targeted research fields, including papers in indexed journals.

Preferred profile: Experience in real and/or laboratorial prototypes, involving software and hardware.

## 11. APPLICATION PERIOD AND APPLICATION OF DOCUMENTS

From 18th October until 31st October 2017.

Curriculum vitae; graduation diplomas; document with courses marks; copy of any previously published works that are relevant for the application evaluation. An application letter with the fellowship reference (SIMOCE\_2017-03) should be included, indicating clearly the motivation of the applicant and the full contact information (as minimum: email address, mobile phone number, and postal address) of the candidate. All the documents prepared by the candidate for the application should be written in English. Documents should be sent to zav@isep.ipp.pt and additionally they should also be sent to GECAD to the following address:

Professor Zita Vale GECAD (Research Group on Intelligent Engineering and Computing for Advanced Innovation and Development) ISEP/IPP Rua Dr. António Bernardino de Almeida, 431 4200-072 Porto – Portugal

#### 12. ADDITIONAL INFORMATION

Can be obtained by phone +351-228340511 or by email zav@isep.ipp.pt

## 13. SELECTION RESERVATION

GECAD may opt to select the approved and non-selected candidates in the scope of the current call for contracting additional researchers for the same project, for a period of 18 months, after the communication of the current call results to the candidates.







Página 2/2 ISEP-DRH-SP-MOD062v00