



UNIVERSIDADE DE COIMBRA

Announcement of Research Fellowships

(call opened between December 19, 2011 and December 30, 2011)

The University of Coimbra (UC) opens a call for granting research fellowships in the framework of the Project SCIAD “Self-Learning Industrial Control Systems Through Process Data”, in the following conditions:

Scientific area: Process control.

No. of fellowships: 3.

Co-financing: the grants are financed by project SCIAD that is co-financed by QREN, in the framework of the “Mais Centro - Regional Operational Program of the Centro”, and by the European Union through the European Regional Development Fund (ERDF).

Object of Activity: perform research and development (R&D) works in the framework of the above mentioned project that runs in partnership between the University of Coimbra (UC) and “Acontrol - Automação e Controle Industrial, Lda” company. Research activities for the creation of systems and methodologies for industrial systems will be developed, namely in the following areas:

- Fellowship 1: control of linear and nonlinear systems with emphasis on control with self-adaptation and control with self-tuning; Research of intelligent control methodologies related to the theme.
- Fellowship 2: multi-variable control and predictive control; research of computational intelligence, fuzzy control, intelligent control, and other methodologies.
- Fellowship 3: fuzzy control systems with emphasis on learning and self-adaptation of the knowledge base; Research of computational intelligence methodologies, and genetic algorithms.

Scientific Supervision: Prof. Doctor Rui Alexandre de Matos Araújo.

Desired profile for the recipient(s) of the grant(s): holding a degree at the master level in the area of Electrical and Computer Engineering, Informatics Engineering, Biomedical Engineering, Physics Engineering, or a related area. Preferential conditions: knowledge on control, fuzzy control, and computational intelligence; Knowledge in the subject area of the activity object of the corresponding fellowship; Intent to pursue a PhD in the area of the fellowship.

Venue of the fellowship(s) activities: Departamento de Engenharia Electrotécnica e de Computadores (DEEC) da Faculdade de Ciências e Tecnologia da Universidade de Coimbra (FCTUC) and Acontrol.

Duration of the fellowship(s): 11 months.

Terms of Renewal: the fellowships may, eventually, be extended for periods of 11 months and up to a total maximum cumulative duration of 33 months for each fellowship. For the decisions on the renewal of the fellowships it will be taken into account the performance of the fellows in the R&D activities.

Financial Conditions of the Fellowship(s): The value of the fellowship will be 980 euros per month and is paid at the end of the month by bank transfer. To this value it is added the voluntary social insurance corresponding to the first level, if the applicant has chosen for its grant, as well as the personal accident insurance. The value of the fellowship will not increase throughout the duration of the fellowship.

Conditions of Activity: the assignment of the fellowship(s) does not generate a relation in terms of the labor law, is carried out under an exclusive dedication basis, according to the status of fellow of the UC according to what is specified in the Rules of Research Grants of the University of Coimbra (Dispatch No. 5129/2005 (2nd), DR No. 48, of March 9, Resolution No. 23/2005 of 5 January of the Senate of the University of Coimbra), Regulation of Advanced Training and Qualification of Human Resources of the FCT (<http://www.fct.mctes.pt/pt/apoios/formacao/ambitoprojectos>) and Law No. 40/2004, of August 18 (Status of the Scientific Research Fellow).

Selection Method(s): Analysis of the Curriculum of the candidate, and of his/her ability and motivation: Candidates will be selected through Curriculum evaluation by a jury consisting of a minimum of three doctorate professors from the UC, and which will take into account the selection and awarding criteria. If necessary, individual interviews with the candidates may be requested. In case no candidate has an adequate profile, the fellowship(s) will not be granted.

Selection and awarding criteria: The appreciation of the curriculum vitae (CV) will focus on the following parameters: (1) curricular elements presented, including the adequacy of the profile and merit of the candidate to needs of the project; (2) Experience in the areas of the tasks to be developed: previous experience in works and/or research and development projects related with the research



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and development program to be developed; (3) verification of the above described preferential conditions. The valuation of these three parameters is expressed by the following weights: (1) 50% (2) 25% (3) 25%.

Formalization of the applications: to formalise the application, the following documents should be sent: (1) Cover/motivation letter; (2) Curriculum Vitae (CV) of the applicant; (3) Copy of the certificate(s) of academic qualifications. The CV should include: (i) contact information, (ii) Academic qualifications (including a complete list of the concluded courses/subjects and their classifications), (iii) List of scientific publications, (iv) Main projects where the applicant has participated, and working experience, (v) other information considered relevant.

Sending the applications: All applications must be submitted in PDF format by email to Prof. Rui Araujo, to the following address: Email: rui@isr.uc.pt.

Postal Address: DEEC, FCTUC, Universidade de Coimbra Polo II, 3030-290, Coimbra, Portugal.

Jury responsible for the selection: will be constituted by the following UC professors: Prof. Doctor Urbano José Carreira Nunes; Prof. Doctor Rui Alexandre de Matos Araújo, Prof. Doctor Jorge Luís Gabriel Ferreira da Silva da Costa Pereira.

Time period for the applications: between December 19, 2011 and December 30, 2011.

Date of publication: December 09, 2011; **Deadline for the applications:** December 30, 2011.

Additional information: The evaluation results will be released by January 30, 2012, to the email released by the candidate. After the publication of the results the candidates are automatically considered notified for, if wanting, to comment on a preliminary hearing within 10 working days after that date. At the end of this period the selected candidate(s) must declare in writing his/her(their) acceptance and declare the date of actual commencement of the fellowship. Unless presentation of worthy justification, the lack of the acceptance declaration within the deadline is equivalent to abandonment of the fellowship. In case of renunciation or abandonment of the selected candidate(s), the immediately higher placed candidate(s) will be notified.

Notes: Effort has been made to accurately write this English version of the document from a translation of the Portuguese version. In case of doubts, mismatches, or errors the Portuguese version of this document is the one that is valid and that holds.