

ANNOUNCEMENT FOR A RESEARCH INITIATION GRANT (BII)

Open application from 3 June to 20 June 2022

UIDP/05567/2020

The Smart Cities Research Center (Ci2) is now accepting grant applications to award 1 Research Initiation Grant (BII) within the scope of the Ci2's Project with the number UIDP/05567/2020.

Scientific area: Electrical and Computer Engineering and related areas.

Admission requirements: Students of professional higher technical courses, bachelor's or master's degree, with preference in the areas of Electrical and Computer Engineering and related areas.

Offer description

Work plan: Participation in R&D activities, to be developed within the Ci2 Research Unit and its laboratories, through the integration in the work plans of the DragonFly - "*Implementation of a mobile robotic surface water quality monitoring system*" project. Briefly, the work plan involves the participation in the design and development of a robotic water quality monitoring system able to operate on vast water resources areas, such as dams, natural reserves, or rivers. I will also involve the implementation of an IoT monitoring and alarm system that allows real-time management of resources and detection or identification of activities causing water pollution.

Legislation and applicable regulations: The grants of this BII is based on the Regulations for Research Fellowships of the Fundação para a Ciência e Tecnologia (FCT), I.P., in force (<https://www.fct.pt/apoios/bolsas/docs/RegulamentoBolsasFCT2019DR.pdf>) of 16 December 2019, amended by Regulation No. 643/2021, of 14 July).

Workplace: The work will take place on the premises of Instituto Politécnico de Tomar at Estrada da Serra, Quinta do Contador, Tomar, namely at the Ci2 facilities at the IPT, including the Electric Traction Laboratories (I185), and other spaces that may be considered suitable to the good development of the work.

Duration of the grants: The grant will last for 3 months, starting on mid-July 2022, non-renewable, on an exclusive basis.

Amount of the monthly grant: The amount of the grant corresponds to € 486.12, according to the table of values of grants awarded directly by FCT, I.P. in Portugal (<http://www.fct.pt/apoios/bolsas/valores>). Payments will be made monthly by bank transfer.

Selection process

Selection method to be applied: Merit of candidates measured by the evaluation of their curriculum to be classified on a scale of 0 to 20 values, according to the following formula and valuation criteria:

$$N = 5 \times FC + IES + AC + CV$$

On what:

N = Classification obtained, from zero to twenty with rounding to the units;

FC = Fraction of credits already obtained compared to the total credits of the course in which the students are enrolled;

IES = Higher Education Institution in which the students are enrolled considering 5 values if the candidate is enrolled in a course at the Polytechnic Institute of Tomar and 2 value if enrolled in a course from another institution;

AC = Alignment of the course (in which the students are enrolled in) with the work plan, considering 4 values if it is a course in the areas Electrical and Computer Engineering, and 2 value if it is a course in the areas of electricity and energy, or electronics and automation, or related fields;

CV = Up to 6 values as a result of the analysis of each candidate's resume, prioritizing their previous experience in research activities.

Candidates will be ranked in descending order of classification, and in the event of a tie in the classification obtained, in this order:

- a) The candidate with the best score in the IES factor;
- b) The candidate with the best score on the CV factor;
- c) The candidate with the best score in the FC factor;
- d) The candidate with the best score in the AC factor;
- e) The applicant with a minor age.

If none of the applicants are considered to meet the necessary requirements to perform the tasks specified in the Work Plan, the grant will not be awarded. Applicants who do not obtain a minimum score of 10 (ten) on a scale of 0 (zero) to 20 (twenty) in any of the selection methods shall be excluded from the selection process.

Composition of the Selection Panel: Manuel Fernando Martins de Barros (Chairman), Henrique Joaquim de Oliveira Pinho and Pedro Manuel Granchinho de Matos (effective members), and Carlos Alberto Farinha Ferreira (facultative member), Adjunct Professors of the Department of Engineering of the Polytechnic Institute of Tomar.

Form of publicity/notification of results: The results of the evaluation will be published within 10 working days from the deadline for submission of applications and the list is sorted in order of ranking of candidates, with the candidates being notified via email. In the event that the selected candidate withdraws, the candidate in the following position on the lists will be admitted until the foreseen vacancy are exhausted.

Prior Hearing: After the results are announced by e-mail, the candidates must consider themselves immediately notified to, if they wish, speak at a prior hearing within a maximum period of 10 working days after that date. The final decision will be taken within 10 working days after the conclusion of the preliminary hearing of interested parties and notified to the candidates by email. If the initial project decision leads to the granting to all candidates, the prior hearing will be waived, in which case the referred project will be equivalent to the final decision.

Complaint and appeal: The final decision referred to in the preceding paragraphs can be filed a complaint within 15 working days to the President of the IPT or an appeal to the highest executive body of the FCT within 30 working days, both after the respective notification.

Application deadline and form of submission process: The competition is open from the 3 to the 20 of June 2022. Applications must be formalized by sending: **(a)** Curriculum Vitae; **(b)** Proof of enrolment in a higher professional technical course, bachelor's or master's degree; **(c)** Proof of the number of credits already obtained and the total number of credits for the course in which they are enrolled. Students at the Polytechnic Institute of Tomar are exempt from submitting the proof referred to in paragraphs b) and c). Applications must be formalized by email simultaneously to the addresses ci2@ipt.pt and fmbarros@ipt.pt , including in the "Subject" field: "Ci2 Projeto Dragonfly UIDP/05567/2020 – Application".

Funding sources: The grants are financed by the Fundação para a Ciência e a Tecnologia (Portuguese Foundation for Science and Technology).

Information and publicity of the granted funding: The contract template and the reporting template, and more information, are accessible on the Polytechnic Institute of Tomar (Divisão de Recursos Humanos www.ipt.pt, and the Smart Cities Research Center (Ci2), www.ci2.ipt.pt).

Instituto Politécnico de Tomar, 30 de maio de 2022.