U.PORTO
FEUP FACULDADE DE ENGENHARIA
UNIVERSIDADE DO PORTO

1 Research Grant Announcement (M/F)

Call open for applications for 1 research grants within the framework of project "DynamiCITY: Fostering Dynamic Adaptation of Smart Cities to Cope with Crises and Disruptions", with reference NORTE-01-0145-FEDER-000073, co-financed by the European Regional Development Fund (ERDF), through the North Portugal Regional Operational Programme (NORTE2020), under Portugal 2020 Partnership Agreement, under the following conditions:

Scientific Area: Electrical and Computer Engineering, Computer Sciences, Computer Engineering or in related fields.

Admission requirements: Candidates who cumulatively meet the following two requirements may apply for this grant:

- Be a student enrolled in a doctoral program in Electrical and Computer Engineering, Computer Sciences, Computer Engineering or in related fields, a requirement to be duly proven at the time of signing the contract.

Or

- Holder of an academic degree enrolled in a non-academic degree course integrated in the educational project of a higher education institution, developed in association or cooperation with one or more R&D units, requirement to be duly proven at the time of signing the contract.

Note: In the case of masters who are enrolled in non-academic degree courses, the scholarship can only be awarded to those who do not exceed, with this scholarship contract, including possible renewals, an accumulated period of two years in that typology of the scholarship, followed or interpolated.

and

- Hold a master's degree in Electrical and Computer Engineering, Computer Sciences, Computer Engineering or in related fields.

If the degree has been awarded by a foreign higher education institution, it must comply with the provisions of the Decree-Law no. 66/2018, of august 16th, and any formalities established there must be fulfilled until the time of signing the contract.

Activity Outline: The DINAMYCITY project is led by FEUP and involves the research units LIACC - Laboratory for Artificial Intelligence and Computer Science, CIITA - Research Center for Territory, Transport and Environment and SYSTEC - Research Center for Systems and Technologies, and consists of a laboratory collaborative and integrated virtual, based on multi-agent systems, to support research,

innovation, and the development of ICT solutions for smart cities, with an emphasis on mobility systems. A holistic and multidisciplinary perspective explores AI techniques to improve the resilience and adaptability of cities in scenarios of large-scale disruptions and crises.

The researcher will be part of the R&D team of the project coordinated by Professor António Pedro Rodrigues Aguiar and will actively participate in the following activities:

A3 - Modelling approaches for sustainable, safe, equitable and responsible mobility

A4 - Data-driven and model-driven analytics

A5 - Multi-agent decision support system for disruption and crisis management

A6 - Dissemination and exploitation of the results

Legislation and regulations: Law Nº. 40/2004, of 18th August, in its current wording (Statutes of Scientific Research Fellow) and Regulation of Research Grants of the Foundation for Science and Technology, I.P., in force (https://www.fct.pt/apoios/bolsas/regulamento.phtml.pt) and Regulation of Research Grants of University of Porto, in force.

Workplace: The work will be developed at the Department of Electrical and Computer Engineering of the Faculty of Engineering of the University of Porto (FEUP), under the scientific supervision of Professor António Pedro Rodrigues Aguiar.

Grant duration: The grant will last until 30/06/2023, with the predicted starting date in **January 2023**, on an exclusive basis eventually renewable but never exceeding the project duration.

Note: This announcement is published pending authorization from the funding authority - CCDRN. Therefore, FEUP will assess this circumstance at the time of the grant attribution, which may not occur.

If the recruitment procedures do not allow the grant to last for a minimum of 3 consecutive months, in accordance with paragraph 3 of article 6 of the Research Grant Regulations of the Foundation for Science and Technology, I.P., the scholarship will not be awarded.

The eventual renewal of the scholarship will be carried out as determined in article 6 of the Research Grants Regulation of the Foundation for Science and Technology, I.P.

Stipend: The grant stipend amounts to 1.144,64€ according to the table of values of the grants awarded directly by FCT, I.P. in the Country (https://www.fct.pt/apoios/bolsas/valores).

The payment will be made by bank transfer.

Selection procedure: Candidates will be graded on a scale of 1 to 5 points. A curricular evaluation (60%) will be carried out, which will focus on the candidate's merit, in which the following factors will be considered:

Curricular evaluation classification = (30% AC1) + (30% * AC2) + (40% * AC3)*

a) AC1 - Academic training:
   - Master's Degree in Electrical and Computer Engineering, Computer Sciences, Computer Engineering - 5 points;
   - Master's Degree in related areas relevant to the project - 4 points;
   - Other Masters - [≥ 0 and < 4] points;

b) AC2 - Master's final average:
   - [≥ 17 values] – 5 points;
   - [≥ 15 and < 17 values] – [≥ 4 and < 5] points
   - [≥ 13 and < 15 values] – [≥ 3 and < 4] points
   - [≥ 10 and < 13 values] – 2 points;

c) AC3 – Research experience:
   - in the project area – [≥ 4 and ≤ 5] points;
   - in areas related to the project – [≥ 2 and < 4] points;
   - outside the project area – [≥ 0 and < 2] points;

After analyzing the submitted documentation, the Selection Jury will interview the 2 best classified in the curriculum evaluation, and candidates who obtain a score lower than 3 points will not be admitted to the interview.

In the interview (40%), topics related to the work plan, previous experience, motivation, and the candidate's CV will be discussed, where the following will be verified:

Interview classification = (60% EC1) +(20% * EC2) +(20% * EC3)*

E-C1 - Knowledge and motivation for the exercise of the function:

- Excellent knowledge and motivation – [≥ 4 and ≤ 5] points;
- Good knowledge and good motivation – [≥ 1 and < 4] points;
- Lack of knowledge or motivation – [≥ 0 and < 1] points

E-C2 - Attitude (evaluates the candidate's behavior in terms of ability to work in a team, ability to manage conflicts, capacity for persuasion, presentation and confidence)

- Excellent attitude – [≥ 4 and ≤ 5] points;
- Adequate attitude – [≥ 1 and < 4] points;
- Inappropriate attitude – [≥ 0 and < 1] points

E-C3 - Capacity of expression and verbal fluency in Portuguese and/or English (coherence and discursive clarity, vocabulary richness, ability to understand and interpret the questions asked).

- Very good ability to express, communicate or interpret – [≥ 4 and ≤ 5] points;
- Good ability to express, communicate or interpret – [≥ 1 and < 4] points;
- Difficulty in expressing, communicating or interpreting – [≥ 0 and < 1] points;

The final classification of the interviewed candidates will result from the sum of the classifications obtained in the Curriculum Assessment (AC) and Interview (E), giving each factor the weight of 60% and 40%, respectively:

Final classification = (60% AC) +(40% * E)*

The right not to hire is also reserved if the candidate with the best final classification does not obtain a classification equal to or greater than 4 points.

Selection Jury:

President: Prof. Dr. António Pedro Rodrigues de Aguiar

Effective member: Prof. Dr. Maria Paula Macedo Rocha Malonek

Effective member: Prof. Dr. Fernando Arménio da Costa Castro e Fontes

Supplementary member: Prof. Dr. Rosaldo José Fernandes Rossetti

Advertisement of final decision: The results of the evaluation will be released to the candidates by email to the email address indicated in the application process.

Deadline for applications and form of presentation of the applications:

The call is open from **07/12/2022 to 21/12/2022** (until 23h59m, GMT time).

Applications must be formalized by email to apra@fe.up.pt, sas.systec@fe.up.pt and to recursoshumanos@fe.up.pt, clearly stating the reference **FEUP-BM1SUBS-SYSTEC_DinamyCity** and including the following pdf documents: Motivation letter (in English), Curriculum Vitae (in English or Portuguese), Copy of certificates evidencing academic degree (referring the classification of each

separated or integrated degree), Declaration on honor that the candidate fulfills the requirement contained in article 6 of the Regulation for Research Grants of the Foundation for Science and Technology, I.P. (model below, for student enrolled in a non-academic degree course integrated in the educational project of a higher education institution, developed in association or cooperation with one or more R&D units) and other documents considered relevant by the applicant.

Declaration on honour

I, (identification of the scholarship holder), holder of the Citizen Card / Visa / Residence Permit no. valid until _____, declare under honour, to be in the conditions of no. 5 of article 6º of the Research Grants from FCT, IP - Regulation No. 950/2019, of 16 December.

Oporto, __/__/__

Signature

_____

(scholarship holder)