

Announcement for Research Scholarship Awarding within the Framework of R&D Projects Financed by National Funds through the FCT/MCTES.

Research Grant (BI) (2 positions)

Project Reference: BI_2024_12_FCT2022.03897.PTDC

Summary: Call for tenders is open for the attribution of 1 Research Grant (BI) within the scope of the R&D institution Autónoma TechLab – Technology Research Center, of the Universidade Autónoma de Lisboa (UAL), project with the reference **BI_2024_12_FCT2022.03897.PTDC** with financial support from the Foundation for Science and Technology (FCT) and the Ministry of Science, Technology and Higher Education (MCTES), through national funds (PIDDAC), under the following conditions:

Generic scientific area: Engineering

Specific scientific area: Electronics and Informatics Engineering

Mandatory admission requirements: a) to be enrolled in a Ph.D. study program. It may also be aimed at graduates and masters enrolled in courses that do not award an academic degree; b) not exceed, with the conclusion of the scholarship contract in question, including possible renewals, an accumulated period of one year of having this type of scholarship, continuous or intermittent; c) not have already been the beneficiary of any other research grant directly or indirectly financed by FCT.

Eligibility of candidates: candidates must meet the eligibility conditions set out in article 9º of the FCT I.P. Research Grant Regulation (2019).

Preferential Factors: carry out the research program as described in the work plan; knowledge of wireless communications; knowledge in mathematical optimization; fluency in writing in English; previous research experience.

Work plan: Data relating to UAV-assisted networks, including UAV characteristics, virtualization technologies, and battery capacities, will be collected and analyzed to understand the current state of service provision and identify areas for improvement. Innovative approaches and strategies to optimize service delivery in UAV-assisted networks will be investigated, with a focus on leveraging virtualization technologies to enhance connectivity and service efficiency. Experiments will be designed to explore the relationship between hover time, serviceability, and energy efficiency in UAVs. Additionally, Task 3-2 will focus on developing pricing schemes for energy harvesting enabled UAV-assisted networks. The research findings will be disseminated through presentations and manuscripts shared with the scientific community at conferences, journals, and workshops. This comprehensive approach aims to advance the field by providing actionable insights and innovative solutions for UAV-assisted network optimization.

Objectives to achieve: Optimizing service delivery in self-energized UAV-assisted networks through innovative approaches and leveraging virtualization technologies.

Applicable legislation and regulations: The scholarship is approved by Law n.º 40/2004, of August 18th, in the current wording published by Decree-Law N.º 123/2019, of August 28th of the Statute of the Research Fellow (EBI), (available at

<https://dre.pt/dre/legislacao-consolidada/lei/2004-58216179>), and Regulation of Research Grants, N.º. 950/2019, of December 16, from the Foundation for Science and Technology, I.P. (<https://files.dre.pt/2s/2019/12/241000000/0009100105.pdf>) and amendments to Regulation No. 950/2019, of December 16, 2019 (available at <https://diariodarepublica.pt/dr/detalhe/regulamento/950-2019-127238533>).

Contracting Institution: CEU – University Education Cooperative, CRL

Workplace: The work will be carried out in person at the facilities of the Autónoma TechLab – Technology Research Center, of the Universidade Autónoma de Lisboa, Rua de Santa Marta, 47, 6th, 1150-293 Lisbon, under the scientific supervision of Professor Dushantha Nalin K. Jayakody.

Scholarship duration: The grant has duration of 3 months, scheduled to start on Sept, 2024. A reserve selection list will be created, which can be used for a maximum of 3 months.

Monthly maintenance allowance amount: The scholarship amount corresponds to a €1.259,64 according to the table of values of scholarships awarded directly by FCT, (https://www.fct.pt/wp-content/uploads/2024/02/Tabela-de-Valores-SMM_atualizacao-2024.pdf), and according to the [contract draft](#). The scholarship will be paid monthly by bank transfer, by the contracting entity.

Exclusive regime: The grantee's duties are carried out on an exclusive basis, under the terms set out in article 5 of the Research Fellow's Statute and the Research Grant Regulations, currently in force.

The selection methods to be used will be the following: Only three candidates who meet the admission requirements will be considered for interview. The candidate selection methods are as follows: evaluation of the Curriculum Vitae (70%); interview (20%) and motivation letter (10%). Only candidates with a weighted average equal to or greater than 15 will be admitted.

The Selection Jury composition: President: Doctor Dushantha Nalin K. Jayakody, Professor Scientific Coordinator, Universidade Autónoma de Lisboa. Vogal: Doctor Gonçalo Valadão, Coordinator of Technology Research Center - Autonomia TechLab, Universidade Autónoma de Lisboa; Doctor Tharindu Ponnimbaduge Perera, Professor of University of Melbourne. Vogal suplente: Doctor Mário Marques da Silva, Director of the Department of Engineering and Computer Science, Universidade Autónoma de Lisboa.

Form of announcement/notification of results: The candidates selected and admitted for an interview are invited by email. The Public Notice and the final evaluation results will be published, through a list ordered by the final grade obtained, in a public place on the websites of Autónoma TechLab (<https://techlab.autonoma.pt>) and of Universidade Autónoma de Lisboa (<https://autonoma.pt/category/artigos/bolsas-de-investigacao/>), and the approved candidate will be notified by email. All applicants will be notified of the decision by email.

Application deadline and form of submission of applications: The tender is open from **30 July 2024 until 16 August, 2024**. Candidacies must be formalized, mandatory, by sending two following documents in digital format (PDF format):

- a) Curriculum Vitae (must contain all elements of endorsement and admission requirements);
- b) Certificate of Habilitation of lecturers of non-requested academic degree, non-editorial, where it confirms the final classifications;
- c) Motivation Letter;
- d) Other documents considered relevant that certify or describe the CV.

The proof of registration in a cycle of studies leading to the obtaining of an academic degree or in a non-conferential degree course must be presented at the contract confirmation.

Applications must be submitted by email to gaid@autonoma.pt, including in the subject field: BI_2024_12_FCT2022.03897.PTDC. Applications sent by other means will not be admitted.

Failure to send any of the documents required in the application is grounds for exclusion (in accordance with the provisions of Article 10 of FCT Research Grants Regulation No. 950/2019).

Complaint and appeal deadline: After the final decision and notification to the candidates, they have a period of 15 working days to make a statement to the President of the Jury, or appeal to the highest executive body of the financing entity within 30 working days.

Final report: The scholarship holder must submit, within 30 working days after the end of the scholarship, a final report of the activities, in digital format (PDF). This report must describe in detail all the activities carried out, the period of time spent on them, the objectives achieved and the respective URL addresses (if applicable).

Number of vacancies: 2

Type of contract: Information not available

Country: Portugal

Location: Lisbon

Host institution: Universidade Autónoma de Lisboa

Application deadline: 16 August, 2024

Organization contact details:

Universidade autónoma de Lisboa

Rua de Santa Marta, 47, 6º

1150-293, Lisbon,

Email: gaid@autonoma.pt

Website: <https://autonoma.pt/>

Check the EN Notice on the EURAXESS Portal: <https://euraxess.ec.europa.eu/jobs/260628>