



Call for PhD Scholar Scholarship on the Internet of Things (IoT)

I. Background

A research team from CMU-Africa, the University of Rwanda, and the University of Nairobi is working on a project titled Birds' Detector and Repellent System for Large-Scale Farming. The project has secured funds as part of "The AFRETEC MEMBER INCLUSIVE DIGITAL TRANSFORMATION RESEARCH GRANT AWARD". The overall objective of the project is to leverage emerging technologies to develop a low-cost sensor device for effectively detecting the presence of birds and deployment of appropriate deterrent measures to safeguard the crops in the farm environment, the specific objectives of the project are two-fold (i) Building and deployment of birds' detection system using computer vision systems, Development and deployment of birds' repellent system. As part of the project, the research team is pleased to offer a scholarship opportunity for a highly talented PhD candidate to work on the project.

II. Description

The inclusive digital transformation project aims to bring together the African Engineering and Technology Network (AFRETEC) focused universities to drive inclusive digital growth through higher education and the power of collaboration to build engineering and technology capacity in education, knowledge creation, and entrepreneurship. Afretec network led by CMU-Africa brings together eight (8) universities including CMU-Africa, the University of Rwanda, The American University in Cairo, the University Cheikh Anta Diop, the University of Lagos, the University of Nairobi, the University of Witwatersrand, and AL Akhawayn University. The project titled "*Birds' detector and repellent system for large-scale farming*" was funded under Afretec to conduct a research study on the Birds' detection and repellent system for large-scale farming. The project aims to detect the presence of birds in large-scale farms like rice farms and trigger the developed and deployed repellent systems to protect grain yields in the field.

III. Funding

The funding of 1 PhD student has been planned under the implementation of the project:

1 position on the Internet of Things, Wireless Intelligent Sensor Networks, Embedded Computing Systems, or another related field.

The duration of the program is three years, the scholarship will cover:

- PhD tuition fees
- Monthly stipend equivalent to five hundred US dollars (\$500)

IV. Application requirements

- To be admitted to a PhD program at the University of Rwanda (In the fields of Internet of Things-Wireless Intelligent Sensor Networks, Embedded Computing Systems, or related fields.
- To have a master's degree in Internet of Things-Wireless Intelligent Sensor Networks, Embedded Computing Systems, or related fields.



V. Application documents

- Application letter addressed to the Director of the Centre for Postgraduate Studies at UR, with a copy to the project CO-PI at the University of Rwanda
- Curriculum vitae (3 pages maximum)
- A copy of Master's degree/certificate
- Copies of academic transcripts
- A copy of the admission letter to the UR-PhD-related program.
- A PhD research concept note
- Two recommendation letters, one from the employer (If employed) and another from an academician
- Copy of National Identity Card or passport

VI. Specific eligibility criteria

- University of Rwanda-Staffs are highly encouraged to apply
- Applicants from these countries are allowed (Rwanda, Kenya, Egypt, Nigeria, Senegal, South Africa, and Morocco)
- Have profound experience in the implementation of IoT projects
- Female candidates are highly encouraged
- High level of English proficiency

VII. Selection Methodology

Shortlisted candidates will be invited to the interview on dates that will be communicated through their respective emails.

VIII. How to apply and key dates

Applicants are requested to send the documents as listed above by email to the scholarship officer; E-mail ur-cpgscholarship@ur.ac.rw at the University of Rwanda, Centre for Postgraduate Studies, Tel:+250792988304 with a copy to UR Project CO-PI Tel: +250788467863 Email: e.twahirwa@ur.ac.rw, not later than 20th December 2024.

IX. Who to contact for any further information

For any other detailed information regarding this call, kindly contact Dr. Twahirwa Evariste, UR Project CO-PI Tel: +250788467863 Email: e.twahirwa@ur.ac.rw

Done at Kigali on 02/12/2024


Assoc. Prof. KAYIHURA Muganga Didas
Acting Vice Chancellor