

#### JOB ANNOUNCEMENT

# **Researcher Statistics and Artificial Intelligence**

Ref: CONS/DR4D/2025/75

The Africa Rice Center (AfricaRice) is seeking a highly qualified **Researcher Statistics and Artificial Intelligence** who will be based at **Bouake, Côte d'Ivoire**. S/He will work under the supervision of the Deputy Director General and Director of Research and Innovation.

#### **About AfricaRice**

The Africa Rice Center (AfricaRice) is a leading pan-African rice research organization committed to improving livelihoods in Africa through strong science and effective partnerships. AfricaRice is a CGIAR Research Center. It is also an intergovernmental association of 28 African member countries, with headquarters in Côte d'Ivoire.

# **Position purpose**

The Africa Rice Center (AfricaRice) contributes to reducing poverty, achieving food and nutrition security and improving livelihoods of farmers and other value-chain actors in Africa by increasing the productivity, profitability and inclusiveness of rice-based agri-food systems, while ensuring the sustainable use of natural resources. AfricaRice, a CGIAR center and an intergovernmental association of 28 African member countries, created in 1970, drives research and innovation through formal partnerships with national agricultural systems, academic institutions, actors' organizations, policy makers and development partners. Its strength lies in technological innovations along the entire rice value chain from breeding, agronomy, value addition, marketing and policy recommendations and in strengthening locally tailored rice research-for-development capacity for reaching impact at scale.

The African continent faces dire challenges in the rice sector. Africa imports 40% of the rice it consumes at a cost of about 6 billion UD\$ annually, while the continent has ample potential to close this gap that comes at an estimated cost of around 10 billion US\$. Demand for capabilities of AfricaRice to support African government and local NARES is on the rise, which requires coordinated management and effectively development of additional businesses to attain the high institutional ambitions. The highly heterogenous production conditions of the African continent, aggravated by the changing climate, calls for customization of technologies to actors, locations and production systems. AfricaRice has generated data for several decades that must serve as its Big Data foundation for the development of advanced analytical methodologies and algorithms for the customization of technology application.



AfricaRice therefore seeks a researcher in advanced statistical methodologies, machine learning methodologies, soil-crop simulation modelling to analyze and interpret data from various agricultural experiments, and to develop the building blocks for Artificial Intelligence tools in agricultural sciences and implementation.

# **Position responsibilities**

Under the supervision of the Deputy Director General and Director of Research and Innovation, the Researcher Statistics and Artificial Intelligence will undertake activities with specific tasks that include, but are not limited to:

- Development and deployment of building blocks for AI models and algorithms across the program teams and the center, including machine learning, use of (close and remote) sensing data, and soil-crop simulation models.
- Do-design trials with researchers that meet statistical validity and conduct advanced analytics of the research data, using appropriate statistical software.
- Compile and aggregate data from different sources, including trial data of the institute and legacy data, to contribute to the population of the Dig-data database of the center.
- Provide analytical support for big data generated under large-scale program initiatives to inform decision-making and model improvement.
- Assist in designing of the database for its effective utilizing by third parties.
- Conduct experiments, e.g. for verification of model development, calibration and validation.
- Contribute to the statistical component of project reports and drafting of research papers.
- Train internal staff, university students, and staff from local research institutions on use of big data, statistical analyses, and building blocks of AI tools.
- Support resource mobilization effort to fund activities of the AI unit.
- Conduct any other duties as required by the supervisors.

### **Qualifications/Selection Criteria**

#### **Education**:

 A MSc degree or equivalent in Computer Sciences, Geoinformation Science, Statistics or related fields, preferably with basic training in or knowledge of agricultural sciences



## **Required professional experience:**

- Experience in the use of current applications in advanced statistical methodologies, machine/deep learning, close/remote sensing methodologies and process-based soilcrop simulation models
- Experience in handling large amounts of data and in programming routines, preferably with R or Python.
- Experienced with Geographical Information System software use (ArcGIS, QGIS, GEE, GEODA, etc.) and good experience in R, Python, Java Scripts and SQL programming.
- Evidence of excellence in computer skills.
- Willingness to travel.
- About three to five years' working experience in this relevant work area.

#### **Required competences:**

- Pleasant and effective communication and interpersonal skills.
- Strong analytical abilities and problem-solving capabilities.
- Ability to work independently and as part of a scientific team within and outside AfricaRice.
- Excellent writing skills.
- Acquaintance with and ability to operate in multi-cultural environment.
- Ability to deliver under time constraints.
- Ability to travel for ground-truth data collection.
- Proactive in his/her undertakings.
- Fluency in either English or French and willingness to learn either of these languages.

### **Terms and Conditions**

- This is a Consultancy position.
- AfricaRice provides an attractive salary and benefits package and a collegial and gendersensitive work environment.
- The initial appointment is for six (6) months with the possibility for renewal based on performance and availability of funding.

# How to apply

- 1. To apply, click on the following link: <a href="https://jobs.africarice.org/">https://jobs.africarice.org/</a>
- Create an account if you are a new user, if not log on with your credentials to access active vacancies select "Researcher Statistics and Artificial Intelligence"
- 3. Follow the step-by-step application procedure.



Our recruitment platform has been updated. To stay informed of vacancies, we invite you to create your account on this new platform.

Only online applications will be considered (If you encounter any technical issue on the career site during your application, or you are prevented to proceed with your application until its final completion: Please kindly revert to us along with the screenshot of the issue through this email: <a href="mailto:africariceHR@cgiar.org">africariceHR@cgiar.org</a>). Applications are not allowed through this email.

Not later than December 10<sup>th</sup>, 2025

AfricaRice promotes equal opportunities and believes that the diversity of its staff contributes to excellence. We thank all candidates, but only shortlisted candidates will be contacted. For more information on AfricaRice, please visit our website at: <a href="www.AfricaRice.org">www.AfricaRice.org</a>