



Data Analyst (Ref: DDG-R4D/PDF/DS/05/18)

Background: The International Institute of Tropical Agriculture (IITA) invites applications for the internationally recruited position of **Data Analyst** to operate under the Consortium for Improving Agriculture-based Livelihoods in Central Africa (CIALCA - www.cialca.org).

The International Institute of Tropical Agriculture (IITA) is a not-for-profit institution that generates agricultural innovations to meet Africa's most pressing challenges of hunger, malnutrition, poverty, and natural resource degradation. Working with various partners across sub-Saharan Africa, we improve livelihoods, enhance food and nutrition security, increase employment, and preserve natural resource integrity. IITA is a member of CGIAR, a global agriculture research partnership for a food secure future. Please visit <http://www.iita.org/> for more information on IITA.

The Data Analyst supports Research for Development activities across the CIALCA region, which includes Burundi, Rwanda and eastern DR Congo. The perfect candidate will have a background in a quantitative or technical field, will have experience working with developing data management and data collection systems, analysing large data sets, and will have some experience in data-driven decision making. He/She will focus on results, be a self-starter, and have demonstrated success in using analytics to drive the understanding, growth, and success of our agricultural research products. This position is based full time in our office in Bujumbura, Burundi or Kigali, Rwanda.

Position Responsibilities

The Data Analyst will work across the following three areas:

Research Design and Implementation

- Interact with a wide variety of people and teams to identify opportunities for, design, and assess improvements to research and development design and implementation.
- Optimize experimental design and sampling frames.
- Collaborate with scientists and mobile app developers to improve data collection tools (ODK and others).
- Support the development of big datasets to empower operational and exploratory scientific analysis.
- Develop, improve and maintain scripts for automating analysis and transfer of data collected through ODK tools to databases.

Exploratory Data Analysis

- Develop and implement procedures for data verification and curation.
- Liaise with database engineers to develop a searchable, web-based repository assembling existing experimental and household agronomic, socio-economic and health data.
- Conduct statistical analyses of experimental and survey-based agronomic, socio-economic and/or health data.
- Use data analysis results to support science and development teams in improving data collection, analysis and reporting.

Decision Support Tools

- Collaborate with geospatial information specialists to develop spatial prediction models.
- Communicating experimental results and implications to research and development teams.
- Support scientists in influencing government, public and private policies through visualization and presentation of data-based recommendations.
- Liaise with software and app developers to integrate prediction models into decision support tools.

Educational Qualifications

The candidate should have a completed MSc in data science, mathematics, physics, bioinformatics, engineering, computer science, statistics or related.

Minimum qualifications:

- 2 years of relevant work experience in data analysis or related field. (e.g. as statistician / data scientist / computational biologist / bioinformatician).
- Advanced experience with statistical software (e.g. R) and database languages (e.g. SQL).

Core Competencies

- Thorough knowledge and demonstrated expertise in managing relational databases. Knowledge of MySQL is a plus.
- Expert knowledge in applied statistics including data analysis and experimental design.
- Experience in developing generic scripts to processes and aggregate data from several sources through programming and statistical software (e.g. R) or other methods.
- Applied knowledge, and experience in food and agricultural sciences.
- Proven capacity in contributing to the documentation of scientific research.
- Strong analytical skills.
- Excellent communication skills, able to interact with a multi-cultural and interdisciplinary team of scientists and development partners on ICT and statistics in layman language.
- Proactive and independent problem solver, and excellent team player.
- Experience communicating the results of analyses with science and development audiences and government, public and private clients to influence their strategies.

Duty station: Kigali, Rwanda or Bujumbura, Burundi.

General information: The contract will be for an initial period of two years. IITA offers an internationally competitive remuneration package paid in US Dollars.

Applications: Applications must include covering letter which should address how the candidate's background/experience relates to the specific duties of the position applied for, curriculum vitae, names and addresses of three professional referees (which **must** include either the Head of the applicant's current or previous organization or applicant's direct Supervisor/Superior at his/her present or former place of work). The application should be addressed to the Head of Human Resources. Please complete our online application form using this link: <http://www.iita.org/careers>.

Closing Date: 15th June 2018

IITA is an equal opportunity employer and particularly welcomes applications from women candidates.

Please note that only shortlisted candidates will be contacted.