Institution:  
Rwanda Green Fund (FONERWA).

Job Title:  
Data Science and Research Specialist

Administrative Unit:  
IT Team

Job Level and Grade:  
3.II

IV:  
500

Index:  
1369

Report to:  
Business Analyst

Responsible for:  
N/A

Functions

Data analysis
- Work with the institution and partners to identify opportunities for leveraging existing data to drive business solutions.
- Identify valuable data sources and automate collection processes.
- Undertake preprocessing of structured and unstructured data.
- Analyze large amounts of information to discover trends and patterns.
- Retrieves data from internal and external sources and data files in order to keep internal databases current and usable.
- Enhancing data collection procedures to include all relevant information for developing analytic systems for the organization and its partners
- Support in data collection, cleaning, compiling, analysis for projects and programs
- Advice and recommend data collection tools by the organization, and partners
- Support in developing data collection tools
- Mine and analyze data from existing and future data registries to drive optimization and improvement.
- Assess the effectiveness and accuracy of new data sources and data gathering techniques across the institution.
- Formulate and lead guided analytic studies against large volumes of data.
- Interpret and analyze data using exploratory mathematic and statistical techniques based on the scientific method.
- Coordinates research and analytic activities utilizing various data points (unstructured and structured) and employ programming to clean, massage, and organize the data.
- Analyze data related problems and determine root causes.
- Works closely with Business Analyst to develop strategies for long term data platform architecture.
- Develop custom data models and algorithms to apply to data sets.
- Use predictive modeling to increase and optimize customer experiences

Database management
- Designs database systems and management tools.
- Install, update, and maintains databases.
- Manage database and ensure the integrity of data.
- Secures database by preparing access and control policies and procedures and implementing disaster recovery procedures.
- Supports application design by contributing expertise to operations and technical support teams.

Job Specifications/Profile

Relevant Qualifications

Or


**Required Experience**

1 Year with Masters, 2 Years for Bachelor.

**Required Competencies**

- Proficient with one or more programming languages (Java, C++, Python, R, etc.)
- Demonstrated experience applying data science methods to real-world data problems
- Experience utilizing visualization tools (list) to take advantage of the growing volume of available information
- Experience writing SQL queries and ETL procedures
- Experience working with data warehouses and data visualization/BI tools
- Experience in database interrogation and analysis tools, such as Hadoop, SQL and SAS
- Experience with NoSQL databases, such as MongoDB, Cassandra, and HBase
- Strong familiarity with machine learning techniques and algorithms.
- Ability to predict trends and identify patterns
- Strong familiarity with statistics
- Analytical/technical mindset