

UR-SINGLE PROJECT IMPLEMENTATION UNIT

OFFICE OF THE COORDINATOR

JOB ADVERTISEMENT FOR DATA SCIENCE SPECIALIST

BACKGROUND

The African Centre of Excellence in Data Science (ACE-DS) is one of 24 Eastern and Southern Africa Higher Education Centers of Excellence in the World Bank's ACE II Project.

The main objective of ACE Il Project is to strengthen selected Eastern and Southern African higher education institutions to deliver quality post-graduate education and build collaborative research capacity in the regional priority areas.

The ACE-DS is a regional Centre for which core mission is to train post-graduate students with combined expertise in statistics, economics, business, computer science, and engineering to use big data and data analytics to solve development challenges.

The Center aquired a High-Performance Computer to calibrate data and deliver high quality data collection, analysis and reporting.

To fulfil optimal functioning, the UR-SPIU calls for qualified and motivated candidates to apply for the following position.

Data Science Specialist (1 position)

Summary of the post

The recruited Data Science Specialist will be responsible for supporting students and staff in the use of High Performance Computer (HPC) for big data analysis and specifically his/ her duties and responsibilities are the following:

- Update and maintain ACE-DS Website at a regular basis
- Keep a responsive web design; stay up to date on the latest technologies and ensure the site is mobile-friendly and multi-platform ready.
- · Oversee new user setup and training on online systems used in the center
- Maintain the performance of the High-Performance Computing Cluster for handling Machine learning, Deep learning and computer vision workloads.
- Ensure security, high availability and accessibility of different systems available at the ACE-DS
- Diagnose and troubleshoot Systems errors.
- · Recommend and implement emerging Big Data technologies.
- · Manage all ICT facilities in the center
- Understand and ensure adherence to the national ICT Policy

EMAIL: spiu.coor@ur.ac.rw P.O. Box: 4285, Kigali, Rwanda WEBSITE: www.ur.ac.rw Page 1 of 4

- Liaise with concerned Staff for procuring ICT equipment basing on the annual work plan and Budget
- Facilitate Academic Staff and Students to benefit facilities available at ACE-DS for Big Data workloads
- Identify relevant data sources for business needs
- Structured and unstructured data collection
- Build predictive models
- Create machine learning algorithms
- Data processing, cleaning and verification
- Analyze data for trends and patterns and to find answers to specific questions
- Setting up and maintain a data infrastructure
- Develop, implement and maintain databases
- Generate insights and insights from datasets and identify trends and patterns
- Preparation of reports for management and project teams
- Create data visualizations
- Responsible to support short courses at center

Required qualification and skills

- Master's degree in data science with bachelor's degree in computer science, Computer Engineering and other related fields with at least 5 Years of Experience in ICT field
- Possession of at least one of the following Big Data certifications CCP DS, CCP CCAH, CCP CCDH, SBDA, ABDA, SDS, ABDE, SBE
- Knowledge of cluster monitoring tools like Ambari, Ganglia, or Nagios.
- Good understanding of OS concepts, process management and resource scheduling.
- Strong Computer Networks skills, CPU, memory and storage.
- Good hold of shell scripting
- Experience with Linux and Windows Server environments
- Extensive experience with relational and N database technologies (MySQL, MS SQL, PostgreSQL Oracle, and MongoDB)
- Certification on one of cloud services (AWS, Microsoft Azure, Google App Engine) is a plus
- Coding knowledge and experience with Programming languages like C, C++, Java, Python, etc.
- Knowledge and experience in statistical and data mining techniques: GLM/Regression, Random Forest, Boosting, Trees, text mining, social network analysis, etc.
- Experience querying databases and using statistical computer languages: R, Python, SLQ, etc
- Experience creating and using advanced machine learning algorithms and statistics: regression, simulation, scenario analysis, modeling, clustering, decision trees, neural networks, etc.
- Experience with distributed and parallel computing big data tools: Map/Reduce, Hadoop, Hive, Spark, Gurobi, etc
- Experience using statistical computer languages (R, Python, Scala, etc.) to manipulate data and draw insights from large data sets.



- Experience working with and creating data architectures.
- Knowledge of a variety of machine learning techniques (clustering, decision tree learning, artificial neural networks, etc.) and their real-world advantages/drawbacks.
- Knowledge of advanced statistical techniques and concepts (regression, properties
 of distributions, statistical tests and proper usage, etc.) and experience with
 applications.
- Excellent written and verbal communication skills for coordinating across teams.
- · A drive to learn and master new technologies and techniques.
- Understanding of reporting and data visualization tools such as Business Objects, PowerBi, Tableau, Dash Plotly, FlexDashboard, etc.
- Excellent analytical skills the ability to identify trends, patterns and insights from data
- Great attention to detail
- Presentation skills ability to write and speak clearly to easily communicate complex ideas in an easy to understand manner
- Skills for problem solving

APPLICATION PROCEDURE:

Interested and qualified candidates should submit their applications online to the spiurecruitment@gmail.com with a copy to infospiu@ur.ac.rw with subject "Application for the position of Data Science Specialist". The application file must contain the following documents:

- 1. Application letter addressed to UR-SPIU Coordinator,
- 2. A detailed Curriculum Vitae
- 3. A copies of academic degree and academic transcripts (as one document)
- 4. Certificates indicating similarly jobs done
- 5. A copies of proof of previous relavant experience and list of publications, if any (as one document.
- 6. A copy of National Identity and/or passport

The Deadline for submission of the Application is set on 18th September 2024 at 5:00pm. Only shortlisted candidates will be required to sit for written test.

Done at Kigali on 11/09/2024

Dr. Michael MUGISHA,

Acting Coordinator

Single Projects Implementation Unit (SPIU)

University of Rwanda.

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