PEOPLE & CULTURE ANNOUNCEMENT

Strathmore UNIVERSITY

JOB OPPORTUNITY AT STRATHMORE UNIVERSITY

Job Title: **Geospatial and Machine Learning Engineer**
Department: **UNESCO CHAIR**
Reporting to: **UNESCO CHAIR**

Basic job summary:

The GIS and Machine Learning Engineer will play a pivotal role in advancing projects that combine Geographic Information Systems (GIS) and Machine Learning (ML) to support innovation in energy access, renewable energy systems, and grid management.

Duties & Responsibilities:

1. **GIS Integration:**
    - Integrate geospatial systems with existing applications to provide real-time mapping and location-based data.
    - Collaborate with teams to ensure data is usable and optimized.
2. **Geospatial Analysis:**
    - Conduct analysis to derive location-based insights for various projects.
    - Develop and execute data collection strategies.
    - Create and present maps, dashboards, and visualizations for different audiences.
3. **Machine Learning (ML) for Data Retrieval:**
    - Design and build machine learning models to automate the extraction of data from unstructured sources.
    - Construct and maintain structured datasets for analysis.
    - Interpret extracted data to find key specifications and insights.

4. **Machine Learning (ML) for Pattern Detection:**

    - Develop and deploy machine learning tools to automate the detection of specific patterns, such as identifying anomalies or fraudulent activities.

5. **GIS Integration:**

    - Integrate geospatial systems with existing applications to provide real-time mapping and location-based data.
    - Collaborate with teams to ensure data is usable and optimized.

6. **Geospatial Analysis:**

    - Conduct analysis to derive location-based insights for various projects.
    - Develop and execute data collection strategies.
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7. **Machine Learning (ML) for Data Retrieval:**

    - Design and build machine learning models to automate the extraction of data from unstructured sources.
    - Construct and maintain structured datasets for analysis.
    - Interpret extracted data to find key specifications and insights.

8. **Machine Learning (ML) for Pattern Detection:**

    - Develop and deploy machine learning tools to automate the detection of specific patterns, such as identifying anomalies or fraudulent activities.
    - Work with stakeholders to align models with project goals.

9. **General Duties:**

    - Maintain detailed project records, including the use of Gantt charts, to track progress and ensure transparency and accountability.
    - Communicate progress metrics and findings through detailed reports, visualizations, and presentations to project managers and stakeholders.

- Stay informed about current best practices and emerging technologies in GIS, data collection, and machine learning to improve efficiency and innovation.
- Work with stakeholders to align models with project goals

Minimum Academic Qualifications:

Bachelor's degree in Engineering, Geoinformatics, Computer Science, Statistics, or a related field.

Experience:

- 5+ years of proven experience in GIS analysis and machine learning.
- Strong understanding of GIS principles and ML model development.
- Experience with GIS software (e.g., ArcGIS, QGIS) and ML frameworks (e.g., TensorFlow, PyTorch).
- Proficiency in programming languages like Python and R, and databases like SQL.
- Experience in the energy sector, particularly on electricity-related projects, and familiarity with renewable energy technologies and trends are an advantage.

Competencies and Attributes

- Project Management Skills: Proficiency in project planning, scheduling, risk management, and monitoring and evaluation (M&E).
- Communication Skills: Strong writing skills for developing reports and the ability to communicate complex information clearly to diverse audiences.
- Stakeholder Management: Ability to effectively engage and maintain relationships with diverse stakeholders, including technical and non-technical teams.
- Analytical Skills: Strong analytical, problem-solving, and critical thinking skills to interpret complex data from GIS and ML outputs and produce insightful reports.
- Research Skills: Experience in designing and conducting research, including both quantitative and qualitative methodologies.
- Familiarity with renewable energy technologies and trends.

Are you qualified for this position and interested in working with us? We would like to hear from you. Kindly send us a copy of your updated resume and letter of application **(ONLY)** quoting ***"Geospatial and Machine Learning Engineer"*** on the subject line to recruitment@strathmore.edu by **12th December 2025.**

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Due to the large number of applications we may receive, kindly note that only the shortlisted candidates will be contacted.

Please be advised that Strathmore University is an equal opportunity employer and does **NOT** ask for money from applicants under any circumstances during its recruitment process. Interested applicants are encouraged to exercise caution upon receiving any such interview opportunity that requires payment of any money.

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