Israel Ropo Orimoloye

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Summary

Implemented GIS and remote sensing solutions across transportation, environmental, and disaster management sectors, improving data integration and spatial analysis. Proficient in ArcGIS Pro, ArcGIS Online, ArcMap, ArcPy, and remote sensing techniques for data analysis, visualization, and automation. Managed spatial databases using SQL and Python, ensuring data integrity and accessibility. Developed GIS-based web applications to enhance decision-making. Conducted spatial and remote sensing analyses for urban planning, environmental impact assessments, and resource management. Strong communication skills with experience in stakeholder engagement, training, and collaborative research.

Education:

- Ph.D. in Geography – University of Fort Hare, South Africa
- M. Tech in Meteorology & Climate Science - Federal University of Technology, Akure
- B. Tech in Meteorology & Climate Science - Federal University of Technology, Akure

Certifications:

- **Certificate in Geographic Information Systems and Global Positioning Systems Applications**
- **Certificate in Python programming**
- **Certificate in Spatial Data Science and Applications**

Employment History:

School of Environment, Geography & Sustainability, Western Michigan University Oct 2023 – Present
Lead Remote Sensing and GIS Specialist
Responsibilities:

- Conducted damage assessments using Synthetic Aperture Radar (SAR) and multispectral imagery, identifying new construction and infrastructure damage in conflict-affected areas.
- Extracted, processed, and analyzed satellite imagery from sources like UAVs, Landsat, Sentinel-2, and Radar, enhancing geospatial intelligence for decision-making.
- Developed Python-based geospatial workflows for data integration, visualization, and reproducible analyses, ensuring consistency across different projects.
- Created interactive GIS applications using ArcGIS Experience Builder and Web AppBuilder, improving stakeholder engagement and accessibility of geospatial data.
- Authored technical documentation and training materials on geospatial data processing and SAR analysis, facilitating knowledge sharing and reproducibility.

University of the West Indies - Trinidad and Tobago (full-time) Sep 2022 – Sep 2023
GIS Analyst
Responsibilities:

- Led the implementation of GIS and Data Management Systems in collaboration with universities, government agencies, and implementation partners to streamline workflows and data sharing.
- Applied GIS tools like Smallworld and spatial data for geospatial analysis, focusing on infrastructure, utilities, and network modeling to enhance decision-making in various sectors.

- Automated data cleansing, validation, and reconciliation processes, improving accuracy and efficiency by 20% over industry benchmarks.
- Produced and analyzed satellite imagery for damage assessments, identifying new construction, and supporting key decisions in conflict-affected regions.
- Developed reusable, reproducible code in Python for satellite imagery analysis, maintained documentation, and ensured high-quality visualizations aligned with ISO guidelines.

Centre for Environmental Mgmt., South African Dept of Environmental Affairs Apr 2019 – Feb 2022
GIS Researcher and Manager
Responsibilities:

- Led data science projects utilizing satellite imagery to assess environmental impacts, integrating machine learning and statistical methods for damage evaluations.
- Conducted damage assessments using Synthetic Aperture Radar (SAR) data, identifying construction areas in conflict zones and developing new indicators for building detection.
- Visualized complex damage assessment findings through clear, accessible presentations, ensuring effective communication of results to stakeholders.
- Authored and maintained comprehensive technical documentation and reusable code, ensuring reproducibility of analysis and peer-reviewed Data Goods.
- Collaborated with cross-functional teams, driving innovation and solving complex problems to fill data gaps for satellite imagery analysis across various countries.