

Adedoyin Samuel Ajeyomi

Address: Abuja Municipal Area Council (AMAC), FCT, Nigeria

Email: adedoyinsamuel25@gmail.com

[Portfolio](#)|[LinkedIn](#)|[Spatialnode](#)|[Github](#)

INTEREST(S)

- The use of machine learning models and spatial statistics to study land use dynamics from earth observation data.
- The use of deep learning and machine models to detect environmental disasters such as flooding, wildfires, and solid waste from earth observation data.
- Integration of cloud computing to process big data and apply geospatial models across various fields, ranging from environmental studies, agriculture, climate change, urban planning, and disaster monitoring.
- Geospatial data management and real-time monitoring of Earth's phenomena.

WORK EXPERIENCE

Geospatial Analyst (Hybrid),

Milsat Technologies Limited, Abuja, Nigeria.

Dec, 2023 – Oct 2024

Contract

Responsibilities:

- Conduct advanced data analytics to extract insights and identify trends.
- Building Dashboard and App using ESRI Suite, Experience Builder, ArcGIS Online notebook
- App Testing and User Trainer
- Design and manage geospatial and statistical dashboards for real-time monitoring.
- Build and optimize ETL processes for efficient data extraction and loading.
- Implement, maintain, and optimize databases for data storage and retrieval.
- Design unbiased questionnaires for effective data gathering.
- Generate intelligence reports from surveyed data for actionable insights.
- Prepare and deliver presentations communicating findings and recommendations.

Data Engineer (Remote internship)

Mappa Technologies

June 2022 - Jan 2024

Responsibilities:

- Develop and maintain automation scripts using Selenium (python) for efficient web data extraction.
- Implement ETL pipelines to facilitate the smooth flow of data within the organization.
- Utilize Docker for containerization of database applications, ensuring consistency across environments.
- Design and optimize databases, with a focus on SQL and PostgreSQL, ensuring data integrity.
- Collaborate with teams to establish automated data scraping processes for timely and accurate information retrieval.
- Implement and manage end-to-end automation of database-related tasks, ensuring reliability.

Geospatial Data Analyst

2020 – 2022

Integral Bridge Solutions (hybrid)

Responsibilities:

- Development of proposals, workplan designs, and technical report writing

- Training clients in using different GIS tools.
- Geospatial and Statistical Analysis and Modelling using various data formats both spatial and non-spatial,
- Performing image analysis using Google earth engine,
- Analyzing spatial data through the use of mapping software and GIS Programming

Data Consultant (hybrid) |Integral Bridge Solutions | Client: Nigeria Beaureau of Statistics (NBS) | Project: National Agricultural Survey (NASC) | July 2022 - October 2022 (4 months)

Responsibilities:

- Led a team of six to develop and implement innovative solutions for data collection and validation for the National Agricultural Survey
- Developed a Python script to automate an ETL process for validating the geolocation of data collected by interviewers in the field, ensuring data accuracy and integrity
- Created a monitoring dashboard to track the performance of over 12,000 field officers, providing real-time insights into data collection activities
- Presented weekly performance reports and provided overviews of surveying activities at the national, state, and local level

GIS Technician |Integral Bridge Solutions| Client: PROPCOM MAI-KARFI | Project: Measuring net change in Greenhouse Gas Emissions (tCO2e) for Propcom Mai-karfi's portfolio of interventions | Sept 2020 – Mar 2021

- Estimated net GHG emissions at the Activity (Beneficiary) level using the FAO EX-ACT tool
- Conducted a study on the impact of Propcom Mai-karfi interventions on greenhouse gas emissions in certain states in Nigeria using the FAO EXACT tool
- Conducted land use and land cover classification and predictions using the Terrset Land Modeling tool
- Used predictive modeling to estimate the status of the different intervention components assuming no intervention was undertaken
-

LEADERSHIP AND VOLUNTEERING EXPERIENCE

**GIS Analyst | Field Data Collector Officer
YouthMapper Research Follow Wastespy**

July 2021 - February 2022 (8 months)

Responsibilities:

- Designed and implementation of Questionnaire using Kobotolbox
- Mapped the illegal dumpsites in Ibadan city using KoboCollect mobile application and combined the map with complementary data and performed spatial analytics to derive insights and achieve the research goal
- Plan and mapped route and location where the survey took place
- Validated and cleaned data collected from the field to ensure accuracy
- Migrated data collected from the field to databases using Python
- Created reports and visualized data to communicate findings and insights to stakeholders

**GIS Tutor
M&E Analytic Group**

Responsibilities:

- Develop a comprehensive GIS curriculum, integrating practical applications in monitoring and evaluation.
- Facilitate real-world GIS projects for students, focusing on applications in public health, distaster management and agriculture.

TECHNICAL SKILLS

- GIS & Remote Sensing: QGIS (and plugin development), OpenStreetMap (OSM), JOSM, ESRI suite (ArcGIS Pro, Arcpy, ArcGIS online packages), Google Map, Carto, ENVI, Erdas Imagine, Google Earth Engine (GEE), ILWIS, STAC.
- Cloud, CMD & Containers: GDAL, Bash, AWS (ECS, s3, Lambda, Dynamodb), GCP(Bucket, Bigquery, Dataproc, cloud function), Terraform, dbt and Docker
- Programming languages and Frameworks: SQL, Python, JavaScript (GEE), Bash, R, Windows, Shapely, Geopandas, Folium, Arcpy, Rasterio, ArcGIS Python API, Selenium, Geemap, ee, Pyogrio, FastAPI .
- Databases: PostgreSQL (PostGIS), AWS RDS, GCP Cloud SQL.
- Collaborating Tools: Git & GitHub, Notebook, Markdown, Tableau, Clickup, PowerPoint, Canva, Slack, and Microsoft Teams.
- Data Analytic: MS Excel, PySpark , Google Data Studio (Looker), Power BI, Tableau, Python, R, SQL, web scraping, and questionnaire design.
- Data Orchestrator: Mage and Apache Airflow
- Others: Technical Writing and interpretation of Analytic results

CERTIFICATION

AWS Cloud Practitioner – [Link]	2023
Datataalk: Data Engineering – [Link]	2024

PROFESSIONAL MEMBERSHIP

- | | |
|--|--------------|
| ● Member, Spatial and Data Science Society of Nigeria. | 2019 to date |
|--|--------------|

EDUCATION

B. Tech: Remote Sensing and Geoscience Information System Federal University of Technology Akure (FUTA), Nigeria Thesis: Dams and Reservoirs Suitability Analysis for Integrated Agricultural System in Nasarawa State, Nigeria.	2016 -2023
--	-------------------

PUBLICATIONS AND CONFERENCE PRESENTATIONS

- Monitoring and Predicting the Influences of Land Use/Land Cover Change on Cropland Characteristics and Drought Severity using Remote Sensing Techniques - Published research findings in a peer-reviewed journal, "Indications in Agriculture" <https://doi.org/10.1016/j.indic.2023.100248>
- **Poster Presentation:** Dams and Reservoirs Suitability Analysis for Integrated Agricultural System in Nasarawa State, Nigeria [\[Link\]](#).
- **GIS Day 2023 (Story Map presentation):** Flood Vulnerability and Its Impact on Osun River Basin [\[Link\]](#)
- **URISA GIS 2023 Digital Competition:** : Zamfara Health Facilities Access App [\[Video\]](#)

AWARDS AND RECOGNITIONS

- I Achieved victory in the META/DSN Geospatial Health Mobility Hackathon (Nigeria) in 2023. Led a team of three to create the best solution, winning a sum of 1,000 USD prize and an award plaque as the top winner from Nigeria [\[Link\]](#).
- I was Recognized as the ESRI Young Scholar Award (YSA) (Nigeria) in 2023, receiving a certificate and plaque. Also, was granted a travel grant to the 2023 UC conference in San Francisco; however, attendance was not possible due to a visa denial.
- I was announced as the Story Map winner during GIS Day 2023 (Nigeria). Presented a story map on "Flood Vulnerability and Its Impact on Osun River Basin," winning a sum of 200,000 naira (\$200USD) and a 1year ESRI License with an award plaque.

LANGUAGE(S)

- English (Proficient) – Writing, speaking, listening, and reading.
- Yoruba (Native Speaker).

REFEREES

Mr. Dayo Oguntoyinbo(Sr. Data Scientist)

Mentor at Mappa Data Engineering

Amazon Web Services UK

+44 7478 844695

dayojohn@amazon.co.uk