MICHAEL SIRYA MWARUAH

Gender: Male ✉ **Email address:** mikesirya@gmail.com

ABOUT ME

I'm a mission-driven geospatial specialist using cutting-edge mapping technologies to build a more sustainable and equitable world. By transforming complex spatial data into actionable insights, I help solve critical challenges in development, conservation, and humanitarian response. My passion lies at the intersection of technical innovation and social impact, where every dataset tells a story that can drive real change.

WORK EXPERIENCE

Junior Geospatial information specialist

UN- Mappers (United Nations Global Service Center) [01/2024 – 06/2024]

City: Valencia | **Country:** Spain | **Email address:** michael.mwaruah@un.org | **Name of unit or department:** UN Mappers - **Business or sector:** Other service activities

- Designed and prepared technical reports, dashboards, and visualizations using Power BI, Tableau, and GIS tools to support data-driven decision-making.
- ·Conducted data transformation and quality assurance processes, converting raw datasets into structured formats suitable for analysis.
- ·Developed and maintained geospatial databases, ensuring data integrity and accuracy through validation and quality control techniques.
- ·Collaborated on mapping projects using OpenStreetMap (OSM), utilizing tools like JOSM Editor and Tasking Manager to enhance data quality.
- ·Automated workflows for processing aerial imagery and spatial datasets, improving efficiency in data analysis.
- ·Facilitated training sessions for diverse audiences, building capacity in GIS and data visualization technologies.

Land Information Management Associate

Ministry of Lands and Physical Planning [05/2020 – 05/2022]

Address: Ardhi House, Off Ngong Rd Nairobi,Kenya, 30450-00100 Nairobi (Kenya) | **Website:** lands.go.ke | **Email address:** info@ardhi.go.ke | **Name of unit or department:** Survey - **Business or sector:** Other service activities

- ·Analysed land use patterns using Python, GIS tools, and advanced statistical methods to inform government policies.
- ·Created interactive dashboards and maps to visualize resource allocation and cadastral survey data.
- ·Engaged stakeholders through simplified newsletters and visualizations, making complex geospatial data accessible to non-technical audiences.
- ·Conducted data engineering tasks such as data cleaning, transformation, and integration into centralized databases for seamless access and analysis.

Geographic information systems Intern

Azimath Company Limited [01/08/2018 – 31/08/2018]

Address: Nairobi Kenya Olesangale Road Siwaka Estate Nairobi Kenya, 5029-00506 Nairobi (Kenya) | **Website:** www.azimath.com | **Email address:** info@azimath.com | **Name of unit or department:** GeoInformation Science - **Business or sector:** Professional, scientific and technical activities

Industrial Attachment involving: Vector data capture, Simple Map Processing, and Image Processing- in Remote Sensing and Spatial Data analysis.

Junior Geographic information systems specialist

Geothermal Development Company [05/2019 – 05/2020]

City: Nairobi | **Country:** Kenya | **Name of unit or department:** Land Survey and GIS - **Business or sector:** Mining and quarrying

- ·Implemented data pipelines for spatial data collection, deformation monitoring, and suitability analysis using R, Python, and GIS software.
- ·Utilized ArcGIS, QGIS, and remote sensing tools to perform spatial data analysis and visualization.
- ·Developed visually compelling maps and dashboards with Adobe Illustrator, Photoshop, and Tableau for internal and external stakeholders.
- ·Conducted exploratory data analysis (EDA) on geothermal datasets, contributing to resource mapping and monitoring projects.

Geographic information systems Intern

Kenya Wildlife Sevice [05/2018 – 05/2019]

Address: Nairobi Kenya, 40241 - 00100 Nairobi (Kenya) | **Website:** http://www.kws.go.ke | **Email address:** kws@kws.go.ke | **Name of unit or department:** GeoInformation Science - **Business or sector:** Other service activities

Link: https://drive.google.com/file/d/18jOPwD7OGL-Take7vU9xq8afTtQ_vsXF/view?usp=sharing

- ·Supported spatial data analysis and mapping projects using ArcGIS and QGIS.
- ·Collected and processed field data using GPS and other surveying tools.
- ·Assisted in the creation of geospatial data products for wildlife conservation initiatives.

EDUCATION AND TRAINING

Master of Science in Geospatial Technologies

University of Munster [09/2022 – 03/2024]

Address: Edificio Rectorado Y Servicios Centrales. Campus del Riu Sec Avinguda de Vicent Sos Baynat, 12006 Munster (Germany) | **Website:** https://www.uni-muenster.de/en/ | **Field(s) of study:** Information and Communication Technologies | **Final grade:** Second Plus Honors Upper Division | **Type of credits:** ECTS | **Number of credits:** 30 | **Thesis:** Erasmus Mundus Joint Master of Science Degree in Geospatial Technologies

Link: https://run.unl.pt/bitstream/10362/165568/1/TGEO297_H.pdf

Data Science with R and Python, Front-End Development(Javascript, HTML, CSS), Databases, and Data Management (SQL), Artificial Intelligence, and Machine Learning, Development of Applications for Geographic Data Exploration and Visualization(Power BI, Tableau), Spatial Data Services, Sources, Standards, and Infrastructures, Geographic Information Systems: Desktop to Web(ArcGIS (Desktop, Server, and Online)), Geographic Information Systems applications and trends (ArcGIS and Q-GIS), Earth Observation and Remote Sensing.

Bachelor of Science in Geospatial Engineering

[01/2014 – 09/2019]

Address: Nairobi Kenya GPO, Nairobi, Kenya, 30197 Nairobi (Kenya) | **Website:** uonbi.ac.ke | **Field(s) of study:** Engineering, manufacturing and construction: ● Engineering and engineering trades not further defined | **Final grade:** Second Class Honors Upper Division | **Level in EQF:** EQF level 6 | **NQF Level:** KNQF 6 | **Type of credits:** KCATS | **Number of credits:** 600 | **Thesis:** Land Cover/Use Change Mapping in Laikipia County, Kenya

Link: https://drive.google.com/file/d/12bP9Aa4N8wWRL7q-k6Ttdak1LmvqmTUO/view?usp=sharing

Land Surveying, Geographical Information Systems (GIS), Remote Sensing, Photogrammetry, Global Navigation Satellite Systems.
Second Class Honors (Upper Division)

LANGUAGE SKILLS

Other language(s):

English

LISTENING C2 **READING** C2 **WRITING** C2

SPOKEN PRODUCTION C2 **SPOKEN INTERACTION** C2

Spanish

LISTENING A2 **READING** A2 **WRITING** A2

SPOKEN PRODUCTION A2 **SPOKEN INTERACTION** A2

German

LISTENING A1 **READING** A1 **WRITING** A1

SPOKEN PRODUCTION A1 **SPOKEN INTERACTION** A1

Levels: A1 and A2: Basic user; B1 and B2: Independent user; C1 and C2: Proficient user

DIGITAL SKILLS

INTERNATIONAL CERTIFICATION OF DIGITAL LITERACY / Remote Sensing Software / Geographical Information Systems (GIS) / Data Gathering, Data Processing, Data Visualization, Data Analysis / Database Management (SQL) / Microsoft Office: proficient user of Word, Excel and Powerpoint / Relational Databases: SQL / Python