

KEITH MWEGA

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GIS Developer

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## PREVIOUS WORK EXPERIENCE

### **GIS Intern: Mathira Water and Sanitation Company (MAWASCO)**

***September 2024-Present***

Responsible for managing and optimizing the organization's GIS system to support efficient service delivery and organizational growth:

- Maintain organization's geospatial database by ensuring data collection in a consistent and efficient manner.
- Undertake mapping projects of the organization's area of coverage and preparing maps to assist in decision making.
- Provide training to staff and other stakeholders on the utilization of GIS and creating awareness on the role of GIS in promoting efficient service delivery as per the organization's mission.
- Spearhead the integration of new and robust GIS technologies to foster efficient and reliable service delivery in the organization

### **Attaché: County Government of Nyeri: Ministry of Lands and Urban Planning**

***February 2023-April 2023***

Assisted the Nyeri County Government in efficient service delivery in the survey and GIS department by:

- Successfully executing topographic, boundary, and cadastral surveys using state-of-the-art equipment, ensuring precise data collection and adherence to industry standards, thus increasing customer satisfaction by 20%.
- Acquiring proficiency in operating Total Stations, GPS receivers, and GNSS systems to collect accurate field data for subsequent analysis.
- Leveraging advanced software like Civil 3D and QGIS to transform raw survey data into detailed maps, plans, and digital terrain models.

**Attaché: Geoscope Limited*****February 2022-April 2022***

Utilized my knowledge and earnest desire to learn to increase organization's output by:

- Conducting comprehensive land parcel analysis, including area calculations, boundary determination, and topographic profiling.
- Digitizing and georeferenced spatial data from various sources to ensure accuracy and detail in maps.
- Gaining a strong understanding of map projections, coordinate systems, and spatial data formats thus creating map outputs fit for analysis and decision making
- Collaborating and learning from fellow surveying experts to utilize state of the art skills and technologies in fostering efficient service delivery

## **ACHIEVEMENTS**

1. I was engaged in a project where we were able to settle clashing families due to absence of correct boundaries through application of surveying techniques.
2. I undertook several mapping projects of areas such as Karatina and Nyeri in Kenya which were used as a basis for carrying out urban planning in these areas.
3. I leveraged my geospatial knowledge in designing a flood prediction mapping system for my undergraduate projects which helped identify flood prone areas in the Lower Tana basin (a flood prone area) in Kenya.
4. Aided in provision of clean water to families and villages as a result of proposed mapping extension projects within Mathira constituency.

## **EDUCATION**

**Dedan Kimathi University of Technology| Nyeri, Kenya*****May 2019- Dec 2023***

Bsc. Geomatics Engineering and Geospatial Information Systems

*Grade Attained:* 2<sup>nd</sup> Class Upper Division

**Moi High School Mbiruri| Embu, Kenya**

***Feb 2015 – Dec 2018***

Kenya Certificate of Secondary Application

*Mean Grade: B+*

## **SKILLS**

### **Geospatial Analysis and Data Management:**

- Proficient in GIS software (ArcGIS Pro, ArcGIS Desktop, QGIS) for geospatial data analysis, mapping, and visualization.
- Skilled in using PostgreSQL for spatial database management and analysis.
- Experienced in Python and JupyterLab for automating geospatial tasks, data processing, and statistical analysis.

### **Web Mapping and Communication:**

- Proficient in web development technologies (HTML, CSS, JavaScript) and mapping libraries (Leaflet) to create interactive web maps for data dissemination and visualization.
- Proficient in utilizing PostgreSQL for data storage and geoserver as a web mapping server to allow designing of Web Applications supporting various functionalities.

### **Microsoft Office Suite**

- Proficient in Word, Excel, and PowerPoint

### **Soft Skills**

Data Analysis, Problem-Solving, Teamwork, Communication (written and verbal).

## **CERTIFICATIONS**

### **1. A comprehensive course on GIS Development**

*Udemy*

**Credential ID:** <https://www.udemy.com/certificate/UC-36be4839-5679-4dec-abf6-0140d81f2f86/>

### **2. WebGIS: From Beginner to Advanced**

*Udemy*

**Credential ID:** <https://www.udemy.com/certificate/UC-603f5618-c527-492c-a1e2-9c9a6869c7b6/>

## REFEREES

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