

THERESA NYATICHI MONARI

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SKILLS

Technical Skills: ESRI ArcGIS Products | QGIS | Python | GDAL Library | Pandas | Geopandas | Leafmap | Matplotlib | Folium | Leaflet | Rasterio | Geemap | Xarray | Rioxarray | Whitebox | Maplibre | Google Earth Pro | Git & GitHub | JupyterLab | Google Colab | MS Visual Studio | RTK | Total Station | Civil 3D | HTML | CSS | Microsoft Office.

Professional Skills: Data analytics | Scientific Research | Accountability | Analytical Thinking | Team Player | Effective Communication | Adaptive and Flexible | Responsible | Trustworthy | Problem-solving | Innovative | Responsive Web Design.

EDUCATION

The Technical University of Kenya

Bachelor of Technology in Surveying Technology

Second Class Honours, Upper Division

GPA: 3.47/4.00

Nairobi, Kenya

Sept 2018 - Dec 2023

- **Relevant Coursework:** Geographic Information Science, Remote Sensing, Cartography and Map Production, Cadastral, Topographic Surveying, Geo-positioning, Geodesy, etc.

WORK EXPERIENCE

Kenya National Highways Authority (KENHA)

Geographic Information Systems Intern

Nairobi, Kenya

Feb 2024 – Mar 2025

- Geographical data Analysis and interpretation to guide efforts of road construction.
- Mapping and visualizing traffic patterns, road network statistics, and possible road maintenance and construction locations.
- Spatial database management of KeNHA's GIS Portal database.
- Analyzing satellite imagery for road projects.
- Geospatial data collection, i.e, topographic data using RTK for road projects.
- Providing geospatial information to infrastructure development and maintenance engineers.
- Road projects fieldwork member for geospatial data collection using RTK, topographic surveying, setting out, road reserve marking, levelling, referencing, cadastral surveying, and static surveying.
- Data visualization using ArcGIS Products, Civil 3D, and QGIS software.
- Digitization of the old topographic maps using ESRI ArcGIS Products.

Kenya National Highways Authority (KENHA)

Land Surveyor (Attachment)

Nairobi, Kenya

Jan 2023 – Mar 2023

- Road projects fieldwork member, Civil 3D mapping, road reserve marking, levelling, referencing, cadastral surveying, static surveying, and topographic surveying.
- Data visualization using ArcGIS Desktop, Civil 3D, and QGIS software.
- Digitization of the old topographic maps using ESRI ArcGIS Products.
- Setting out road infrastructure such as footbridges and drainage culverts.

OTHER CERTIFICATIONS

ESRI MOOC: Spatial Data Science: The New Frontier in Analytics | Make an Impact with Modern Geo Apps | Transform AEC Projects with GIS and BIM | Imagery in Action Going Places with Spatial Analysis.

Fundamentals of Remote Sensing: The NASA Applied Remote Sensing Training (ARSET).

PROFESSIONAL MEMBERSHIP

The Institution of Surveyors of Kenya (ISK)

ISK Membership No: 5418

Aug 2022 - Current