

Sylvester Wanina
Nairobi, Kenya
sylvesterwanina8@gmail.com, +254 727 526 019, linkedin.com/in/sylvesterwanina,
github.com/Vesta2000

Professional Summary

Geospatial Data Analyst with 3+ years' experience in spatial data processing, geospatial storytelling, remote sensing, and automation. Proven ability to deliver geospatial insights across environmental and development contexts, especially within East Africa. Proficient in ArcGIS, QGIS, Google Earth Engine, and Python. Demonstrated success in mapping, spatial analysis, and interactive dashboard development. Passionate about applying GIS for climate resilience, infrastructure planning, and public health.

Education

University of Nairobi

BSc, Geospatial Engineering (Expected Sept 2025)

Experience

Geospatial Extern - National Geographic Society + The Nature Conservancy (Remote) **Jan – Mar 2025**

- Analyzed Nairobi River pollution with a focus on the Kibera stretch using secondary geospatial data.
- Designed a compelling ArcGIS StoryMap combining topographic maps, before-and-after satellite imagery, and Survey123 inputs.
- Mapped pollution hotspots and community restoration efforts using ArcGIS Online and Survey123.
- Honed spatial storytelling and participatory mapping for conservation impact.

GIS Intern (Geospatial Attaché) - Ministry of Lands, Kenya (Nairobi) Aug - Oct 2024

- Supported land use planning through field data collection, digitization, and spatial database management.
- Conducted map production and geospatial analysis using ArcGIS Pro and QGIS.
- Contributed to cadastral mapping and topographic updates.

Dashboard & Data Specialist - CloudFactory Kenya (Remote) **Jan 2022 - Dec 2024**

- Developed and maintained Google Sheets dashboards automated using Apps Script to track QA performance.
- Created custom functions and triggers in Google Apps Script for task assignment, data syncing, and reporting.
- Processed and annotated large datasets (image, audio, text) for machine learning use cases.
- Ensured clean, structured datasets using scripting to validate and correct entries.
- Collaborated with QA and engineering teams to ensure data quality across projects.

Projects

Nairobi River Pollution Analysis (Externship, NatGeo + TNC)

- Analyzed solid and liquid waste pollution along the Nairobi River in Kibera using secondary spatial data
- Created a StoryMap combining web maps, satellite imagery, and community-based pollution data. https://areg.is/bfGW
- Focused on community-driven conservation and environmental storytelling

LULC Classification using Google Earth Engine

- Conducted supervised land use/land cover classification (2015–2022) using Sentinel-2
- Applied the Random Forest algorithm and computed area statistics per class
- Exported classified rasters and visualized changes using charts and GEE scripting

Healthcare Accessibility for Malaria Patients (Final Year Project)

- Performed network analysis in ArcGIS Pro to map health facility access in Rarieda Constituency
- Used road and health facility data to model travel time and accessibility patterns
- https://drive.google.com/file/d/11pqD4SDWlGaiveZD8HEOHBc38X7 i8VG/view?usp=sharing

Skills

- GIS Software: ArcGIS Pro, ArcGIS Online, QGIS
- Remote Sensing: Satellite image analysis (Sentinel, Landsat)
- Land Surveying & Spatial Data Analysis
- Programming: Python, R, SQL
- Field & Community Engagement: Participatory mapping, spatial storytelling
- Database Management: GIS database creation and maintenance
- Data Visualization: ArcGIS Dashboards, StoryMaps, Infographics

Interests

Football | Travelling