

BENARD OKELLO OTIENO OYUGI

P.O.BOX, 15353 - 00509, Nairobi, Kenya | +254 729482189 | benardokellotieno@gmail.com

PROFILE

Geospatial Researcher/Specialist & Data Analyst with 10+ years of experience in GIS, remote sensing, and data-driven decision support. Skilled in **Python automation, database dashboards, and live geospatial pipelines**, with proven expertise in **Google Earth Engine, QGIS/PyQGIS scripting, and PostgreSQL/PostGIS spatial analysis**. Strong track record in leading teams, training staff, and delivering advanced geospatial and non-spatial insights for agriculture, infrastructure, and environmental resilience.

SKILLS

- **GIS & Remote Sensing:** ARC GIS Pro, ARC GIS Online, QGIS, 2D,3D GIS Analysis, Mobile collection Tools using Kobo, Survey123, ODK, Q-Field, hand-held GPS, RTK operation, Global Mapper, Photogrammetry Application Master (INPHO).
- **Data Analysis & Database:** Power BI, Spatial data management using Postgreql and PostGIS, Data Analysis and Dashboard creation, Spatial data QA/QC.
- **Project Management & Training:** Microsoft Office Applications, Project coordination, Management & Training, Building training manual Reports, Effective team leader.
- **Soft Skills:** Interpersonal Skills, Contingency Analysis, interpretation, diagnosis, Dedication, Commitment, unrelenting pursuit, Excellent communication, Superb Time management, Good delegation skills, Eye for detail & analytical, Leadership Skills
- **Programming & Automation:** Python (Pandas, GeoPandas, Matplotlib, Plotly, PyQGIS), Automation scripting for QGIS & geospatial workflows, API integration & data pipelines.
- **Cloud & Remote Sensing:** Google Earth Engine (JavaScript & Python APIs), Google Cloud / BigQuery (basic data engineering workflows)
- **Data Science & Visualization:** Live dashboards (Power BI, Plotly Dash, Streamlit), Statistical analysis (time series, regression, classification), AI-assisted geospatial analysis

WORK EXPERIENCE

Ramani Geosystems

Jun 2014 - Nov 2014

Internship

- Created innovative geospatial vector dataset products using a range of GIS tools (2D and 3D mapping) and data analysis techniques, resulting in improved data accuracy and faster project delivery.
- Enhanced the integrity and accessibility of geospatial databases by ensuring accurate mapping specifications and data quality using PostgreSQL and PostGIS, aligning with rigorous data transformation standards.
- Compiled, symbolized, and created maps using advanced cartographic techniques while documenting steps for data transformation and cleansing to support quality migration processes.
- Enhanced and geo-referenced aerial imagery and cadastral plans to improve spatial accuracy and facilitate precise data mapping and transformation requirements during system migration.
- Delivered basic technical assistance internally and externally, contributing to improved operational efficiency and stakeholder satisfaction.
- Collaborated with GIS Technicians and Assistants to ensure the delivery of high-quality data that met client specifications and adhered to established data transformation guidelines, improving client satisfaction.
- Reviewed and improved geospatial vector products' quality through detailed assessments to ensure data accuracy, reliability, and consistency with data migration standards.
- Provided technical and administrative support for the Technical Manager, enhancing team efficiency by ensuring timely and accurate completion of data quality and mapping tasks.

Ramani Geosystems Limited

Dec 2014 - Oct 2015

GIS Technician

- Conducted terrain editing using stereo workstations with either stereo image pairs or Lidar point clouds to support accurate data mapping for migration projects.
- Performed digital stereo mapping using stereo pairs to create 3D vector data for GIS or CAD platforms, ensuring consistency in data structures for effective data transformation.
- Executed Lidar point cloud processing including project set-up, cloud calibration, classification, terrain modeling, and data product creation, with an emphasis on data validation.
- Led Quality Assurance & Quality Control efforts for project work, ensuring proper consistency of processes and deliverables in line with data migration and transformation standards.
- Conducted technical research to remain current with industry developments and best practices, supporting the continual improvement of data mapping and validation methodologies.

Ramani Geosystems Limited

Nov 2015 - Aug 2022

GIS Technician - Team Leader

- Technical training to new production team members and offer training and support to visiting students/Interns.
- Supervision of mapping technicians.

- Allocation of assignment, duties, and tasks.
- Compile and review initial data outputs from production team before submissions.
- Data compilation in both ArcMap & AutoCAD and produce soft copy maps and perform printing for hardcopies for clients.
- First level quality control assessments of work out from production team.
- Any other related technical and administrative duties as required by manager and the other roles above.
- Provide basic technical assistance and guidance for the production team members.

Ramani Geosystems Limited

Aug 2022 - Present

Senior GIS Technician

- Technical Project Management.
- Provide training, coaching, assign tasks and monitor quality and quantity of work for GIS Technicians, GIS assist Technicians, and interns.
- Performs data analysis using ArcGIS/QGIS and related extensions/add-ons, relational databases, and other computer software; Apply the capabilities of GIS, databases, and other computer programs to solve complex spatial and relational problems.
- Conducts data analysis and preparation of training manual documents, data reports, and maps.
- Monitors and analyzes project and programmatic budgets.
- Communicates complex technical issues both verbally and in writing
- Developed automation scripts in Python/PyQGIS to streamline data cleaning, validation, and mapping workflows, reducing manual processing time by 40%.
- Designed interactive dashboards linked to live PostgreSQL/PostGIS databases, enabling real-time monitoring of field data collection and mapping progress.
- Application of Google Earth Engine for large-scale remote sensing analysis, including vegetation monitoring, climate-related change detection, and temporal NDVI analysis.
- Conducted advanced spatial and statistical analysis integrating both geospatial and non-spatial datasets to support agricultural monitoring and environmental resilience projects.

EDUCATION

University of Nairobi

Oct 2009 - Dec 2013

Bachelor of Arts, Geography and Environmental studies

- Coursework:** Geography and Environmental studies

SHORT COURSES & ACCOMPLISHMENTS

- **Disaster management - Incident Command System (ICS 1 and 2), and First Aid training:** St. John Ambulance Head Quarters at Nairobi, dedicated member- 2012
- **CPR/First Aid - Emergency Life Support, Water Rescue and Decision Making in Incident Management:** Collaboration with Polish and Kenyans government at St. John Ambulance Head Quarter at Nairobi-2012
- **Emergency Operation Centre (EOC)- Disaster management:** Humanitarian Peace Support School (HPSS) Nairobi Embakasi - 2018
- **Esri MOOC - Cartography, Going Places with Spatial Analysis.**
- **GIS Specialization:** offered by University of California "COURSERA".
- **GIS Mapping and Spatial Analysis Specialization:** offered by University of Toronto "COURSERA".
- **Python for Data Science** (self-study - UDEMY).
- **Google Earth Engine** (self-study - UDEMY).
- **Data Visualization** with Power BI / Plotly Dash, Streamlit (self-study - UDEMY).

REFEREES

Teresa Mbatia
Lecturer, of Nairobi
0717 769 479 | teresambatia@gmail.com

Boniface Mworira
Regional Sourcing Specialist – TomTom Maps
0722 677 555 | boniface.mworira@tomtom.com

Helen Wawira
Head of Geospatial Solutions – Ramani Geosystems
0722 965 134 | helen.wawira@ramani.co.ke

Portfolio: <https://my-portfolio-website-blush-ten.vercel.app/>