

PROFILE

Geospatial Information Scientist with expertise in GIS, remote sensing, and drone data analysis. With hands-on experience in climate forecasting, remote sensing workflows, and geospatial analysis. Proficient in training Graph Neural Networks (GNN's) for weather prediction, developing Google Earth Engine pipelines, and updating SpatioTemporal Asset Catalogs (STAC). Experienced in dashboard development and decision-support tools, with a strong passion for advancing climate resilience, ecosystem restoration, and sustainable land management.

CONTACT

Personal Portfolio:
https://portfolio-karanja-benjamin.vercel.app/

LinkedIn:
https://www.linkedin.com/in/benjamin-ndung-u-87585a268/

Email:
ndungubenjamin025@gmail.com

GitHub:
https://github.com/Benjamin025

KARANJA BENJAMIN NDUNG'U

EDUCATION

JOMO KENYATTA UNIVERSITY OF AGRICULTURE AND TECHNOLOGY JUJA, KENYA.
Bachelor of Science in Geospatial Information Science
September, 2021 – May, 2025
First Class Honours

WORLDQUANT UNIVERSITY
Applied Data Science Lab
May, 2024 – November, 2024

Naivasha Day Secondary School
January, 2016 – November, 2019
Kenya Certificate of Secondary Education B+

WORK EXPERIENCE

Landscape Alliance
GIS & Remote Sensing Analyst - SPACIAL Lab.
Jan, 2026 – Current

- Contributes to the training, tuning, and validation of the Google GenCast weather forecasting model using Graph Neural Networks (GNNs).
- Developing data processing pipelines in GEE for spatial data integration and climate resilience assessments.
- Assists in updating STAC catalogs with satellite datasets to support geospatial data workflows.

HOBBIES

- GIS blogging,
- Mapping & Personal GIS projects
- Rugby

LANGUAGES

- English
- Swahili
- Basic proficiency in French

Certifications

- Applied data Science lab
- UAV in precision Agriculture
- Digital Earth Certificates
- ESRI Academy
- NASA ARSET trainings

World Agroforestry – CIFOR – ICRAF
GIS & Remote Sensing Intern - SPACIAL Lab.
May, 2025 – December, 2025

- Contributed to the training, tuning, and validation of the Google GenCast weather forecasting model using Graph Neural Networks (GNNs).
- Developed data processing pipelines in GEE for spatial data integration and climate resilience assessments.
- Assisted in updating STAC catalogs with satellite datasets to support geospatial data workflows.

DRONE RESEARCH GROUP - GIS and Remote Sensing Intern
May, 2024 – August, 2024

- Conducted drone data collection and processing for agricultural applications.
- UAV data imagery processing utilizing WebODM, Pix4D, Cloud Compare.
- Generated Orthomosaic, DSM, DTMS

SKILLS

Technical Skills:

- **GIS & Remote Sensing:** QGIS, ArcGIS, ArcGIS Pro, SNAP, ERDAS, Cloud Compare, Agisoft, WebODM.
- **Machine Learning:** GNNs and CNNs
- **GIS programming:** Python, R, Streamlit, JavaScript, HTML, CSS.
- **Geospatial Data Acquisition:** RTK GPS, Total Stations, UAV's.
- **DataBase Management:** PostgreSQL and PostGIS.
- **Cartography and Mapping:** Spatial Analysis.
- **Visualization and Communication:** dashboard development, geospatial storytelling, report writing

Soft Skills

- Effective Communication
- Problem Solving
- Team Collaboration
- Leadership