



Geoinformation Technologist specializing in GIS, Cartography, Remote Sensing, Earth Observation, and Geospatial analysis. Experienced in spatial planning, land acquisition, and geospatial project management, with emerging expertise in data science, AI, and Machine learning. Passionate about environmental management, climate resilience, mineral prospectivity mapping, disaster risk assessment, and sustainable development through innovative, evidence-based geospatial solutions.

● EDUCATION AND TRAINING

Master of Science in Geospatial Information Systems and Remote Sensing: 2023–2026: Dedan Kimathi University of Technology

Bachelor of Technology in Geoinformation Technology: 2018–2021: Technical University of Kenya.

Diploma Technology in Geoinformatics: 2008–2010: The Kenya Polytechnic University

● WORK EXPERIENCE

2018 – Current: South Eastern Kenya University

Technologist- GIS and Remote Sensing

- Manage inventory and maintenance of geospatial and laboratory equipment, including GIS software installation and updates.
- Support teaching by handling GIS and remote sensing practicals and guiding students in skill development.
- Monitor student performance and provide timely feedback to enhance practical competencies.
- Assist with administrative duties and contribute to departmental research and consultancy activities.
- Participate in organizing fieldwork, geospatial trips, and development of short courses.

2017 – 2018: University of Nairobi

Gis and Remote Sensing Technical Assistant

- Maintain inventory and ensure proper functioning of geomatics and laboratory equipment.
- Prepare and organize practical sessions for effective content delivery.
- Supervise and support students during practical activities and maintain adequate contact hours.
- Develop and standardize practical materials while identifying evolving geospatial training needs.
- Participate in planning and execution of geospatial field trips and field-based tasks.

2015 – 2016: Geodev (K) LTD

Gis Technician

- Conducted spatial mapping and supported integrated urban development planning across multiple counties, including land use analysis and satellite data interpretation.

- Managed geospatial data creation, GPS-based data collection, and updating of cadastral databases using GIS tools.
- Delivered GIS training, developed technical presentations, and supported stakeholder engagement through mapping services and workshops.

2014 – 2015: Bridge International Academies

Gis Assistant Research

- Performed geoprocessing, geostatistical analysis, and spatial suitability modeling to support planning and decision-making.
- Produced maps and trained researchers and stakeholders in GPS use and geospatial data acquisition.
- Maintained client relationships by providing technical support and identifying new opportunities.

2012 – 2014: Geomaps Africa

Gis Technician

- Conduct QA/QC checks and review spatial data for accuracy, completeness, and reliability.
- Develop, process, and manage GIS/CAD data, including digitizing and database updates.
- Produce maps, graphs, and reports using GIS/GPS technologies and cartographic principles.
- Verify geographic and land-use data through field inspections and surveys.
- Support engineering, planning, and environmental teams with spatial analysis, mapping, and data management.

2009 – 2009: Kenya National Bureau of Statistics (KNBS)

Cartographer/Gis Technician Attachee

- Collected and verified spatial data (facilities and points of interest) using GPS and field manuscripts.
- Processed geospatial data through scanning, Georeferencing, digitization, and attribute table creation.
- Edited maps, geodatabases, and cadastral/geographic datasets to ensure accuracy and consistency.
- Delineated boundaries and enumeration areas (EAs), and transferred them onto base maps.
- Developed geodatabases and produced standardized maps for EAs, including integration of GPS data and area calculations.

PUBLICATIONS

1. Litho-Structural Mapping via Machine Learning and Geodata on Remotely Sensed Data in the Tharaka-Kanzungu, Kitui-Kenya. **DOI:** 10.7176/JEES/15-5-02
Jerald Odek, Mark Boitt, Kuria Thiong'o, Patrick Kariuki

CONFERENCES AND SEMINARS

03/06/2026 – 03/06/2026: Research Dessimination Workshop (SEKU)

THEME: Advancing Research, Innovation, and Knowledge Sharing in Agriculture, Water Security, and Environmental Resilience in a Changing Climate.

Sub-Theme: Sustainable Agriculture and Food Security Climate Change, Environment and Sustainable Development Water and Natural Resources Management.

16/09/2021 – 16/09/2021: Virtual Webinar

Realize your sustainability Vision with Gis

GeoVision Webinar Conference was conducted by Esri India.

09/09/2021 – 09/09/2021: Virtual Webinar

Qualitative GIS for Expressive Mapping of Resilient Futures (EMoRF)

Participated in a Webinar on “Qualitative GIS for Expressive Mapping of Resilient Futures (EMoRF)”, which was facilitated by Dr. Faith Taylor (King’s College London) and Mr. Talib Manshur (Kounkuey Design Initiative).

18/08/2021 – 18/08/2021: Virtual GeoVision Webinar

ArcGISforReal -Time Situational Awareness

Attended GeoVision Webinar for ArcGIS for Real-Time Situational Awareness

28/07/2021 – 29/07/2021: Virtual Conference India

Esri India User Conference 2021

Participated in a Webinar on Esri India the Science of Where User Conference 2021

● **HOBBIES AND INTERESTS**

Conducting Research

Train students on evidence-based research, consultancy and practical skills on spatial data analysis and presentation.

Travelling

Carrying out nature walk to answer what and where spatially.

● **REFEREES**

1. Dr. Mary Mwangi – Geology and Met Dept. Chairperson, South Eastern Kenya University

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2. Dr. Stanley Odhiambo Sewe – Mathematics and Actuarial Science Dept. Chairperson, South Eastern Kenya University

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Phone Number: +254 725474937

3. Mr. Harrison Njeru – Geospatial and Space Technology Dep. Gis and Photogrammetry Technologist, University of Nairobi

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