RACHEL AYUMA

Email: ayuma4917@gmail.com

Phone: +254111485475

Location: Nairobi, Kenya

PROFESSIONAL SUMMARY

Results-driven Geomatics Engineering professional with specialized expertise in GIS applications, remote sensing analysis, and surveying technologies. Licensed remote pilot with hands-on experience in aerial data collection and spatial analysis. Collaborative team player with strong interpersonal skills, proficient in geospatial software and digital marketing analytics through SEO analysis experience. Seeking to leverage technical skills, innovative problem-solving abilities, and a team-oriented approach to contribute to infrastructure development, agriculture, environmental monitoring, or geospatial consulting projects.

EDUCATION

Bachelor of Science in Geomatics Engineering and Geospatial Information Systems

Jomo Kenyatta University of Agriculture and Technology, Juja

Graduation: December 2025

Relevant course work: Remote Sensing, Geographic Information Systems, Land Survey, Engineering Survey, Cartography, Computer Science, Programming, Photogrammetry, Spatial Database Management

Final Year Project: "Cross-Regional Transfer Learning for Landslide Susceptibility Modelling"- Applied transfer learning techniques using SVM model trained on landslide data from West Pokot to predict susceptibility in Elgeyo Marakwet. Demonstrated effective knowledge transfer from data-rich to data-scarce regions, achieving 83% accuracy without model retraining.

Kenya Certificate of Secondary Education

Moi Forces Academy-Lanet

2019- Grade A-

Kenya Certificate of Primary Education

St. Mary's Mukumu Girls' Primary

2015-Score 416

EXPERIENCE

Industrial Attachment - Engineering Surveying
Remcosult ltd

Duration – May 2024-July 2024

- Conducted engineering surveys for major infrastructure projects including Ngong Road and Dagoretti-Riruta Road developments

- Performed static GNSS surveys for high-precision control point establishment and monitoring along the Dagoretti- Ngong road

- Represented company at Kenya National Highways Authority (KENHA) tender briefing meetings and project progress reporting sessions

- Processed and analyzed survey data using ArcMap for road design and construction planning

- Collaborated with other surveyors to provide accurate survey data for road alignment

- Gained extensive experience in infrastructure surveying standards and highway engineering protocols

Industrial Attachment - Land Surveying
Geopas Licensed Land Surveyors and Consultants
Duration -May 2023 – July 2023

- Conducted general boundary and fixed boundary land surveys for property demarcation and legal documentation

- Assisted in land subdivision projects including field measurements and boundary establishment
- Processed title deeds and prepared technical documentation for land registration
- Drew and processed mutation forms for property transfers and subdivisions
- Operated surveying equipment including Total Station and GPS for precise boundary measurements

Freelance Data Annotator
Upwork
Duration – October 2024- March 2025

- Performed precise image and video annotation for machine learning datasets
- Collaborated with international clients to meet project specifications
- Developed attention to detail and quality control skills transferable to geospatial data processing

SEO Content Writer & Analyst
StudyingNurse.com
Duration – July 2023-present

- Drive organic website traffic through strategic SEO content creation and optimization
- Write and publish SEO-optimized blog posts using WordPress content management system
- Conduct keyword research and implement SEO best practices to improve search engine rankings
- Analyze website performance metrics and adjust content strategy to maximize traffic growth
- Create engaging, educational content tailored to target audience needs and search intent

CERTIFICATIONS & TRAINING

Remote Pilot License (RPL) – Geoid Technologies Drone Academy (2025)

Interior Design Certificate – Alison Online University (2023)

SKILLS

Technical Skills

- **GIS & Remote Sensing:** ArcGIS (ArcMap, ArcGIS Pro), QGIS, ENVI, Google Earth Engine
- **Surveying:** Total Station, Static GNSS/GPS, Boundary Surveys, Engineering Surveys
- **Programming:** Python, R, SQL, MATLAB
- **Design & CAD:** AutoCAD
- **Digital Marketing:** WordPress, Google Analytics, SEO Analysis, Keyword Research
- **Other:** UAV Operations, Machine Learning (SVM), PostgreSQL/PostGIS

Soft Skills

- Leadership
- Teamwork
- Time management
- Problem solving
- Geospatial analysis

Other Skills

- Swimming
- Singing

REFERENCES

1. Dr. Harison Kipkulei

Tutor Fellow, Department of Geomatics Engineering and Geospatial Information System , Jomo Kenyatta University of Agriculture and Technology.

Email: hkipkulei@jkuat.ac.ke

2. Mr. Moffat Magondu

Lecturer, Department of Geomatics Engineering and Geospatial Information System , Jomo Kenyatta University of Agriculture and Technology.

Email: mmagondu@jkuat.ac.ke

3. Mr. George Watene

Lecturer, Department of Geomatics Engineering and Geospatial Information System , Jomo Kenyatta University of Agriculture and Technology.

Email: gchege@jkuat.ac.ke