# VINCENT KIPYEGON

Email: <u>vincentkipyegon02@gmail.com</u>
LinkedIn: <u>https://www.linkedin.com/in/pyexxy</u>
GitHub: <u>https://github.com/Pyexxy</u>

Location: Nairobi, Kenya

#### PROFESSIONAL SUMMARY

Ambitious and detail-oriented Geospatial Engineering student at the University of Nairobi, expected to graduate in September 2025, with practical experience in spatial data analysis, digital mapping, remote sensing, and topographic data processing. Proficient in Google Earth Engine, ArcGIS Pro, QGIS, and Blender, with growing expertise in software development through PLP Academy's Software Engineering program (ongoing). Passionate about leveraging geospatial technology and coding to address challenges in climate action, agriculture, and urban resilience. Experienced in freelancing, leadership, and delivering data-driven solutions for NGOs, startups, and academic partners.

#### **EDUCATION**

# **B.Sc.** Geospatial Engineering

University of Nairobi, Nairobi, Kenya Expected Graduation: September 2025

Relevant coursework: Remote Sensing, GIS Applications, Spatial Data Analysis,

Topographic Mapping

## Software Engineering Program

PLP Academy

Expected Graduation: August 2025

Focus: Programming, Web Development, Software Design, Software Testing

#### PROFESSIONAL EXPERIENCE

# Industrial Attachment - Geospatial Support

Survey of Kenya, Kericho County Offices May 2023 – August 2023

- ✓ Drafted survey data using AutoCAD for cadastral and topographic maps.
- ✓ Participated in ground control and cadastral surveys, ensuring accurate geospatial data collection.

## Freelancer – Geospatial & Data Services

Remote

2023 – Present

- ✓ Delivered geospatial analysis, digital mapping, and scripting projects using Google Earth Engine, ArcGIS Pro, and Python for international clients.
- ✓ Built predictive models integrating GIS with frontend visualization tools.
- ✓ Supported environmental and urban planning initiatives through data visualization and geocoding.
- ✓ Data scraping from different websites using python libraries.

#### LEADERSHIP EXPERIENCE

i. Finance Secretary, 2024 – 2025

Geospatial Engineering Students' Association (GESA)

University of Nairobi

- Oversaw budgeting and financial planning for association activities and events.
  - ii. Finance Secretary, 2025

Ajira Digital Club, University of Nairobi

- Managed club finances and collaborated with stakeholders to organize digital skills training.
- Led workshops to empower youth in freelancing in the digital markets.
  - iii. Publicity Secretary (2023–2024)

Geospatial Engineering Students' Association (GESA) University of Nairobi

Promoting geospatial events and initiatives.

Managing GESA's social media accounts.

# **SELECTED PROJECTS**

- Flood Risk Prediction and Impact assessment Model.
  - Developed a web-based flood prediction model using Sentinel-1 and Google Earth Engine, integrating building exposure analysis.
  - Built a scalable dashboard for disaster management.
- Mangrove Vegetation & Temperature Correlation Lamu County (2024)
  - Conducted NDVI and land surface temperature analysis using Sentinel-2 and geospatial

## intelligence.

- Secured 2nd place in GESA GIS Week Visualization Challenge.
- Urban Growth Analysis Eldoret City (2024)
  - Detected urban sprawl patterns using Sentinel-2 and Jupyter Notebook on the DUNIA platform.
  - Awarded Best Project at RCMRD's Mjini Hackathon.
- Predictive Maize Yield Model Trans Nzoia County (2025)
  - Modeled maize yield impacts using MODIS, CHIRPS, and WorldPop data to support agricultural planning over a 10-year period.

#### **TECHNICAL SKILLS**

- Geospatial Tools: ArcGIS Pro, QGIS, AutoCAD, SAGA GIS, Blender, Google Earth Engine (JavaScript & Python), Photogrammetry (Blender, Reality Capture)
- Programming & Tools: Python, Git, Jupyter Notebook, HTML/CSS (learning), Excel (Advanced)
- Data & Visualization: Power BI, Tableau, Google Sheets, Data Scraping, Geocoding, Spatial Modelling
- Web Mapping & Remote Sensing: Sentinel-1, Sentinel-2, Landsat, Web Apps (GEE)
- Soft Skills: Report Writing, Client Communication, Proposal Writing, Time Management, Teamwork

#### **CERTIFICATIONS**

- i. Spatial Data Science: The New Frontier in Analytics Esri, 2024 (Certificate: <a href="https://encr.pw/f7x9q">https://encr.pw/f7x9q</a>)
- ii. The Company Series Program Afretech (<a href="https://acesse.one/NxjZb">https://acesse.one/NxjZb</a>)
- iii. Ajira Digital Program Freelancing and Digital Skills, 2023
- iv. Zero Waste Workshop UNEP & UN-Habitat, 2025
- v. Software Engineering Scholarship PLP Academy, Ongoing
- vi. GIS for Climate Action Esri MOOC, 2023 (https://llnq.com/Sk5K2)

## REFERENCES

Available upon request.