Calyne Khamila
Remote sensing analyst

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I have a background in environment with more than 3 years of using remote sensing data, GIS, machine learning algorithms and quantitative spatial statistical modelling support natural resources and urban management initiatives.

Experience

January 2022 - current
Remote sensing analyst *Regid Carbon Kenya*
- Working on forest biomass mapping and carbon estimation using satellite imagery, allometry equations and machine learning

June 2020 – March 2021
GIS specialist *Digireg BV Netherlands*

- Trained CNN model for urban land cover mapping
- Conducted stereo-mapping of the urban environment using aerial images and google earth
- Performed Quality control and assurance of data, checking and correcting errors

March 2016 – August 2017
Forest remote sensing specialist *Farm Forestry Smallholders Producers Association of Kenya*

- Provided geospatial support to planning of farm forestry transformation plans
- Did mapping and monitoring of forestry resources
- Conducted data analysis and modelling of ecosystem services
- Collaboratively developed a business model for sustainable farm forestry production
- Worked with farmers at grassroot level to promote farm forestry production

Research/highlighted projects

- MSc Thesis: I have written a paper in consultation with Associate professor Dr Thomas Groen for publication. The paper examines the tradeoffs between productivity and biodiversity of European Forests. The original thesis is available at *http://essay.utwente.nl ›Khamila*
- I am currently working on a paper combining sentinel-1 and sentinel-2 data in google earth engine to determine the spatial pattern and temporal dynamics in savanna vegetation in Maasai Mara Ecosystem in Kenya
- I did a project on using cross polarized PALSAR sensor of ALOS-2 satellite data to model above ground biomass of tropical rainforest in East Kalimantan in Indonesia
- I presented a paper during the 2014 Stockholm Environmental Institute (SEI) write-shop on transition to modern energy systems

Education

September 2017 – March 2019
MSc Geoinformation Science and Earth Observation Specialization in Natural Resources Management
ITC University of Twente, Netherlands

May 2011 – December 2015
BSc Environmental Science
Kenyatta University, Kenya

Personal Training (MOOC)

- Using Google Earth Engine for land monitoring ***ARSET NASA***
- Agricultural Crop Classification with Synthetic Aperture Radar and Optical Remote Sensing ***ARSET NASA***
- Forest cover mapping and monitoring with Synthetic Aperture Radar ***ARSET NASA***
- Spatial data science: the new frontier in data analytics ***ESRI***
- Python for Everyone ***ESRI***

Skills

Software: R, Python, QGIS, ArcGIS, Google Earth Engine, ERDAS Imagine, eCognition, SNAP

Languages: English (full professional proficiency), French & Dutch (limited professional proficiency, Swahili (native)