

Joseph Paintsil

paintsil610@gmail.com | www.linkedin.com/in/joseph-paintsil | github.com/JoeyPaintsil | www.josephpaintsil.com

ABOUT ME

Geospatial Analyst with over four years of experience leveraging GIS software and programming to solve complex spatial challenges. Skilled in building fully automated workflows and interactive GIS and Remote Sensing dashboards that streamline geospatial data processing and significantly reduce pipeline execution time. Experienced in developing full-stack web applications and high-accuracy machine learning models for spatial predictions. Proficient in Python, JavaScript, and cloud computing, with a strong commitment to continuous learning and skill development

EXPERIENCE

Remote Sensing Data Scientist

April 2025 – Present

Abeya

- Creating remote sensing dashboards for automated remote sensing analysis which reduced processing time of the pipeline from about 4 hours to 8 minutes
- Creating machine learning models for automated tree species identification
- Creating machine learning models for automated deforestation analysis
- Creating Python scripts to automate workflow tasks.
- Researching on ways to improve remote sensing methodologies

Geomatic Engineer

September 2022 – August 2023

Licensed Professional Surveyor (Mr. Jonas Aryan Paintsil)

- Processed Satellite imagery with ArcGIS and utilized it for large-scale demarcation
- Created software to automatically generate land plans, reducing site plan production time from 45 minutes to 5 minutes
- Utilized Python and Excel for advanced survey computations, enhancing accuracy and efficiency.
- Developed detailed topographic and thematic maps using ArcGIS for various projects.

Geomatic Engineer

October 2021 – September 2022

Lands Commission

- Used Python to create a coordinate converter that automatically plots converted coordinates to Google Earth which was utilized by Ghanaian Surveyors. The download link can be found here: [Gmap Download](#)
- Processed remote sensing satellite imagery for analyses, including Normalized Difference Vegetation Index (NDVI) assessments.
- Designed and implemented Python software to automate and simplify routine tasks.

EDUCATION

Erasmus Mundus Scholar - Geospatial Technologies

September 2023 – Present

Universidade Nova de Lisboa, University of Münster, Universitat Jaume I

Portugal, Germany, Spain

Bsc. Geomatic Engineering

September 2017 – November 2021

Kwame Nkrumah University of Science and Technology

Ghana

PROJECTS

Dynamic Flood Risk Assessment with Machine Learning Models | Python React Tailwind CSS TypeScript

- Utilizing machine learning to develop a model for flood risk prediction
- Creating an automated flood risk prediction dashboard. | link: [Automatic Flood Risk Predictor](#)

Proximity Dashboard | React Tailwind CSS Python

- Creating a python script that calculates the drive time from various locations
- Created a dashboard that displayed drive time of various locations

Flood Risk Mapping with Analytical Hierarchy Process (AHP) | ArcGIS Pro

- Processed raw geospatial data and satellite imagery to derive critical flood risk factors maps such as Drainage density
- Processed different geospatial data to develop a comprehensive flood risk map showing areas highly vulnerable to flooding.

Gmap | Python Git | link: [Gmap Download](#)

- Developed an app with Python that converts local Ghanaian coordinates to Google Earth coordinates (WGS 1984)
- Configured the app to automatically plot converted coordinates onto Google Earth

JoeLocator | Python Database HTML CSS JavaScript Git Leaflet | link: [JoeLocator](#)

- Developed a website enabling users to search amenities within a set radius and download location data for analysis.

TECHNICAL SKILLS

Languages: Python, JavaScript, HTML/CSS,

Frameworks: Node.js, Flask, Express.js, Embedded.js, React, Tailwind CSS, TypeScript

Software & Tools: ArcGIS Pro, QGIS, Postgres, MongoDB, Fast API, Google Cloud Platform, Google Earth Engine PyCharm, Esri Suite, AutoCAD, QGIS, VS code, Microsoft Office Suite

Libraries: pandas, NumPy, matplotlib

Abilities: Machine Learning, GIS Analysis, GIS Web Development, Web GIS, Python Desktop App Development, Web Scrapping