

# Lucy Muriithi

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## Summary

I am a tech enthusiast who is passionate, hardworking and has always been curious about Technology. Experienced Backend and Full Stack Developer with a demonstrated history of working in web development, information technology, and geospatial data analysis. Skilled in developing e-commerce applications and working with geospatial technologies. Skilled in Software Development, Python (Programming Language), and its frameworks specifically Django and Flask. I have a solid portfolio in AI, including skills in AI career essentials and prompt engineering.

## EXPERIENCE



### Backend Developer

#### InternPulse

*April 2024 - June 2024*

- Developed an e-commerce app (Farmdine) using Python and Django.
- Developed API endpoints for managing likes and comments, ensuring efficient data handling and user interaction.
- Implemented CRUD operations for products
- Utilized SQLite during local development and PostgreSQL during production for better scalability and performance.
- Ensured all endpoints adhered to RESTful principles and provided proper status codes and responses.
- Integrated Swagger for comprehensive API documentation, including descriptions and expected responses.
- Developed and executed unit tests to ensure code quality and reliability. Utilized Postman for API testing
- Worked closely with frontend developers to ensure seamless integration of APIs.
- Assisted in setting up continuous integration and continuous deployment (CI/CD) pipelines to streamline the development process.
- Implemented cron jobs to keep the server responsive and prevent downtime.



## Software Engineer

### J.P. Morgan & Chase Co.

January 2024 - April 2024

- Job simulation under Forage with practical tasks:
- Interface with a stock price data feed
- Use JPMorgan Chase & Co. frameworks and tools
- Display data visually for traders
- Open source contribution



## Certified Full Stack Software Developer

### ALX Holberton School California

Aug 2022 - Nov 2023 (15 months)

- Introduced to Web Development using Flask, a Python Framework. Developed a clone of AirBnB, a web application for property rental management, allowing users to list, search, and book properties.



## PYTHON DEVELOPER

### University Of Nairobi

Jan 2023 - June 2023 (6 months)

- Worked on Nairobi County's Spatial Technologies Project
- Worked with a team of 3 to develop backend scripts using Python within Google Earth Engine (GEE) to automate the monitoring surface temperature changes in an urban area, case study of Nairobi, capital city of Kenya.
- Provided the findings and data to researchers at the Kenya Meteorological Department, aiding in their studies on urban climate impacts and temperature monitoring



## AI/ BACKEND DEVELOPER

### Kenya Space Agency

September 2022

- **Participated in Small-scale Crop Mapping using AI/ML for Mizani App**
- **Backend Development:** Developed and implemented backend services in Python to process and analyze satellite imagery for small-scale crop mapping. Utilized machine learning libraries such as TensorFlow and Scikit-learn to build predictive models for crop detection and classification.
- **AI/ML Integration:** Introduced to AI/ML techniques to develop algorithms for analyzing geospatial data. Implemented data preprocessing pipelines, feature extraction methods, and model training processes to ensure accurate and efficient crop mapping.
- **Collaboration and Teamwork:** Collaborated with a multidisciplinary team, including researchers and engineers, to integrate AI/ML solutions into the crop mapping framework. Worked alongside

Sifa Kinoti, Lovell Karinge, Eric Muli, Shelley Stephanie, and Mercy Mungata to enhance the project's technical capabilities.



## **PROJECT: Automated Geospatial Data Processing and Visualization**

*University of Nairobi - Kibwezi Dryfield Station*

*June 2022 - August 2022*

- **Backend Development:** Developed Python scripts in GEE for automating data processing tasks, including data cleaning, normalization, and transformation. Explored using Flask to build APIs for facilitating data exchange between different components.
- **Introduction to Interactive Visualization:** Acquired skills in using JavaScript and D3.js to create interactive visualizations, enhancing user experience
- **Introduction to Data Management and Analysis:** Gained knowledge in managing spatial data using PostgreSQL with PostGIS, performing spatial queries, and conducting data transformations. Developed proficiency in Python-based data analysis using libraries such as Pandas and NumPy to derive insights from geospatial data. Worked collaboratively to interpret and present findings to stakeholders.

## **Licenses & Certifications**

**Bsc Geospatial Engineering-** University Of Nairobi

**12-month Software Engineering (Backend)** - ALX Holberton School California

**Software Engineering Job Simulation** - J.P. Morgan Chase & Co.

## **Skills**

Mentoring • Teamwork • Leadership • Python • Django • Flask • Back-End Web Development • MySQL • Github Actions • REST APIs

