Clinton Nyaore

Machine Learning Engineer

As a machine learning engineer, my work involves designing and developing machine learning models and systems that can automatically learn and improve from data. I work on a wide range of projects, including natural language processing, computer vision, recommendation systems, fraud detection, and predictive analytics.
My role involves gathering and cleaning data, selecting and engineering features, choosing appropriate algorithms and models, and optimizing them for performance and scalability. I work with a range of technologies and tools, including Python, TensorFlow, PyTorch, scikit-learn, and cloud computing platforms such as AWS and GCP.
My work as a machine learning engineer is critical in enabling organizations to extract insights from large datasets and make data-driven decisions. I collaborate with data scientists, software engineers, and product managers to ensure that the machine learning models are integrated into the organization's software systems and are performing effectively. I am passionate about using the power of machine learning to solve complex problems and make a positive impact in the world.

Contact

Phone

+254 7455 504 421

Email

cnyaore@gmail.com

Address

48 Magwagwa, Nyamira, Kenya

Linkedin

https://www.linkedin.com/in/clinton-nyandigita-0a7590215

Github

https://github.com/Clinton-Nyaore/Clinton-Nyaore

Education

2019-2023
BSc Computer Science
Laikipia University, Kenya

2021-2022
Machine Learning Scientist with Python
Datacamp

2022
AI Programming in PyTorch
Udacity

2021
Data Scientist in Python
Datacamp

2020-2021
Introduction to Machine Learning
Udacity

Experience

2021 - Present

Google Developers Students Club, Laikipia University, Kenya

Lead Machine Learning Engineer - Part-time

I help interested students understand the rapidly growing field of Machine Learning. I also offer support in projects that require machine learning from data collection to model creation and deployment to production.

2022 - Present

Vunatec, Makueni, Kenya

Computer Vision Engineer - Contract

As a computer vision engineer, my work involves developing and implementing algorithms and systems that enable machines to interpret and understand visual data from the world around us. This involves designing and training machine learning models, processing and analyzing images and videos, and developing software to enable computer vision applications such as object recognition, image segmentation, tracking, and 3D reconstruction. I work with a wide range of technologies and tools, including deep learning frameworks such as TensorFlow and PyTorch, image processing libraries such as OpenCV, and hardware platforms such as GPUs. My work is essential in enabling machines to see and understand the world mainly in the agricultural sector. The company is focused on helping mangoes farmers reduce post-harvest costs through the use of computer vision.

2023

CodeClause, India

Artificial Intelligence Intern -Remote

As an AI intern, I had the opportunity to work with a team of experienced AI professionals and gained hands-on experience in the field of AI. I also had the opportunity to work on cutting-edge research projects through working collaboratively as part of a team. I was also learnt new technologies and tools, and was able to adapt quickly to changing project requirements.

Expertise & Skills

- Computer Vision
- Machine Learning
- Artificial Intelligence
- Python Programming
- HTML5
- CSS
- Desktop Applications
- Git & Github
- Scikit-Learn
- Flask
- Heroku
- AWS
- MS Office
- Deep Learning

Hobbies

- Traveling and exploring new places
- Watching documentaries
- Reading the bible
- Reading technical books
- Gaming, both online and offline
- Cooking, baking, or experimenting with new recipes
- Watching movies
- Watching football games
- Playing pool table
- Physical exercising

Language

English

Kiswahili

Projects

Laikipia University, Kenya

Offline Speech and Audio to Text Desktop Application

In the project, I and a team of four people aimed to build a desktop application that could transcribe offline speech and audio to text using the Vosk API and Pyqt5. We started by researching the Vosk API documentation to understand how to use it for speech recognition. They then developed a Python script that could take audio files as input, process them using Vosk API, and output the transcribed text. The team thoroughly tested the script to ensure that it could accurately transcribe different accents and languages.

Next, the team integrated the Python script with the Pyqt5 interface to create the desktop application. The application allowed users to select audio files from their computer, record audio using a built-in recorder, or connect to a microphone to transcribe speech to text. The application displayed the transcribed text in real time, and users had the option to save the transcribed text as a file or copy it to the clipboard.

Throughout the development process, the team collaborated and communicated effectively to ensure that the project met the requirements and was delivered on time. We also tested the application thoroughly to identify and fix any bugs or errors.

Once the project was complete, we built a useful tool that could help individuals transcribe offline speech and audio to text easily and accurately.

Vunatec, Makueni, Kenya

Mangoes Classification and Grading using Computer Vision

In the project a team of 20 people worked to build an android application and a conveyor belt system for mangoes classification to help farmers reduce post-harvest loss. The goal of the project was to develop a system that could automatically classify and grade mangoes based on their size, color, and maturity level, thus making it easier for farmers to sort their produce and reduce waste.

The team began by gathering a large dataset of mangoes images, representing different sizes, colors, and levels of maturity. They then used this dataset to train a machine learning model that could classify and grade mangoes based on their visual features. The team used computer vision techniques such as image segmentation, object detection, and feature extraction to develop a robust model that could accurately classify and grade mangoes.

Next, the team developed an android application that would allow farmers to take pictures of their mangoes using their smartphones and receive instant feedback on their quality. The application was built with a user-friendly interface and integrated with the trained machine learning model to enable real-time classification and grading of mangoes.

The team also developed a conveyor belt system that would transport mangoes from the farm to the sorting area, where they would be automatically classified and graded based on their visual features. The conveyor belt system was equipped with sensors and cameras that would capture images of the mangoes, and the images would be analyzed using the trained machine learning model to determine their quality.

Throughout the development process, the team collaborated closely to ensure that the android application and conveyor belt system worked seamlessly together. They tested the system thoroughly to identify and fix any errors or issues that arose.

Once the project was complete, the team had developed a useful tool that could help farmers classify and grade their mangoes more efficiently, reduce post-harvest loss, and increase their profitability. The android application and conveyor belt system could be deployed to farms across the region to help farmers improve their operations and increase their yield.

Reference

Andrew Wambua

Co-founder, Vunatec

Phone: +254 725 792347

Email : andrew.wambua2000@gmail.com

Betty Mbithi

Co-founder, Vunatec

Phone: +254 722 966444

Email : bettyk.mbithi@gmail.com