Slider with the box:

Gaming in the metaverse

Slider with building:

Enter the world of healthcare through machine learning

Slider with globe:

Build your data wherever you are

My resume:

I’m a computer programmer with experience in python, Javascript, Solana, Solidity, familiar with Rust, tools in machine learning such as tensorflow and keras. Hardware experience includes familiarity with Arduino.

Picture section:

My name is Rosemary, a junior majoring in Computer science with research experience in machine learning. I spend my leisure learning and perfecting my programming skills by building new projects and blogging about my experience using medium and hasnode.

Remove the read more.

I work in the field of computer programming:

Data Science:

Application of data science in finding solutions to business problems by studying the past trends and predicting future trends using company data and writing recommendations based on the predictive trends.

Machine learning:

Using machine learning to improve analytical model building through automation which enables the system learn from given data by understanding patterns and making decisions with minimal human intervention.

Web 3:

Decentralization of applications by building on public blockchains which is trustless.

Machine learning:

Detection of Buried explosive objects using machine learning:

This is a research project that involved creating a hybrid model of convolutional neural network and long short-term memory networks to detect and segment buried explosive objects such as landmines and IDEs.

Web 3:

Smart contracts with Polygon:

This project deals with step-by-step implementation of smart contract for a generative art NFT collection which is deployed to the polygon network.

Data Analytics:

This project analyzed the rate of vaccine progression in Africa using Nigeria as a case study in comparison to the world data. The case study in this project couldn’t be compared due to lack of public data.

Portfolio:

Data science:

Vaccine progression in the world, Africa and Nigeria

Frontend:

Restauranteur portfolio of Chef Jayden Tega

Machine Learning:

Image classification using transfer learning

Data science:

Football Transfer analysis

Machine Learning:

AI and 2D medical imaging

Web 3:

Simple game implementation using solidity and react.

Data science:

Marketing Analysis

Overview 1:

Data Analysis with Visualization: COVID-19 Vaccine Progression

Overview:

The novel Coronavirus disease also known as COVID-19, is a new strain of SARS-Cov-2 that has ravaged the world as a global pandemic with its rapid spread and high mortality. This has brought together the different stakeholders in the world from the government to academia to researchers and scientists to curb this virus through vaccine development and testing. Currently, there are varieties of vaccines all around the world in different countries and this analysis seeks to monitor its progression.

Task:

Tracking the progress of the Covid-19 vaccine in Nigeria in comparison to Africa and the world.

Methodology:

Data collection, cleaning, preprocessing and visualizations showing data from around the world . Narrowing the analysis to Africa and picking the case study, Nigeria for the analysis based on the types of vaccines available and the rate of vaccinations.

Conclusion:

The aim of this analysis is to answer the following questions.

1. Vaccines used around the world
2. Situation in Africa
3. Situation in Nigeria.

Link: https://medium.com/analytics-vidhya/data-analysis-with-visualization-covid-19-vaccine-progression-84ea786d5ab4

Overview 2:

AI and 2D medical Imaging

According to Appen, data annotation is the categorization and labeling of data for AI applications. This categorization and labeling is done to achieve a specific use case in relation to the business problem you are trying to solve. There are people whose job it is to annotate these data for machine learning application, and are called annotators. These annotators without test validation can lead to bias in data as humans are unconsciously bias and could lead to inaccurate or improper labelling. I will be demonstrating the use of annotating software provided by Appen to create annotation for detecting pneumonia in an X-ray image.

Task:

In this project, annotators would be helping us identify images with pneumonia symptoms from the x-ray images for easier identification aiding precision medicine for healthcare practitioners.

Overview:

Pneumonia is a respiratory disease that hospitalizes more than 500,000 Americans with a high mortality rate. This disease cuts across all age demographics with infants and the elderly being high risks. Despite all, this disease can be treated and can be prevented using vaccines.

Methodology:

To make this a success, three labels is provided; yes to indicate the presence of pneumonia, no to indicate the absence of pneumonia and unsure if the annotator isn’t sure in the situation that testers assigned do not have domain knowledge and to give room for mild cases and false positives. The following steps needs to be followed:

Examine the image carefully.

If Pneumonia is present, select yes. If it is absent, select no. If unsure, mild case or undecided, mark unsure.

Only look for the indications of pneumonia.

If there are no indications, mark unsure.

To make the above exercise less stressful, example images are attached to differentiate the indicators of a healthy lung and a pneumonia diseased lung.

Conclusion:

Data annotation is an important process of any machine learning application as it is the foundation on which performing models are built.

Link: https://medium.com/analytics-vidhya/ai-and-2d-medical-imaging-4adf502f5773

Overview 3:

Image classification using transfer learning:

Transfer learning is repurposing a pre-trained model for another but similar usage. This method is seen in various machine learning applications especially in situations where the dataset is relatively small.

Overview:

In this project, I built an image classification model from scratch using transfer learning. When I said from scratch, the dataset was my custom dataset which I scrapped using the IDT tool with my own custom classes.

Task:

Most people tend to have issues classifying bags and carry-ons. In this project, I chose to work with 5 classes namely; Backpack, Briefcase, Duffle, Handbag and purse.

Methodology:

Scraped custom data, cleaned, and preprocessed it which includes putting them in corresponding folders. Built and trained the model using transfer learning with an accuracy 87% and deployed using streamlit.

Conclusion:

In the project folder, there are two more models done without transfer learning and looking at their graphs, they were overfitting. This is because the number of data was really small and needed to be boosted.

Link: <https://share.streamlit.io/nwosu-ihueze/first_deploy/main/app.py>

Overview 4:

Football Analysis

Overview:

In football, once the transfer window opens, clubs starts bidding, buying, loaning, borrowing or selling their players. This transfers are done to get the ‘best’ players or sell the ‘worst’ players. Transfers are pretty expensive, so clubs and leagues go for the best they can get or players to build their teams.

Task:

I would be doing an exploratory data analysis on the data.

Methodology:

Data is collected, cleaned and analyzed to answer the following questions:

1. Which clubs are the top 10 selling clubs?
2. Which clubs are the top 10 buying clubs?
3. Which leagues are the top selling leagues?
4. Which leagues are the top buying leagues?
5. Does age determine the value of a player?
6. Which position is most sought for?

With inferences in the above questions.

Conclusion:

When clubs and leagues are making transfer decisions, many factors are put into consideration whether to build their team from ground up or get the best players for their team.

Link: <https://medium.com/analytics-vidhya/eda-on-football-transfers-between-200-2018-a004e06ef087>

Overview 5:

Marketing Analysis:

A retail analytics company wants to perform a market segmentation of their clients using their curated data of 2.5 years.

Task:

Create a targeted ad marketing campaign by dividing their customers into at least three distinctive groups.

Methodology:

After cleaning and preprocessing, k-means clustering was used to visualize clusters and principle component analysis was used to reduce dimensionality.

Conclusion:

This project is one of the projects from my certification courses on Udemy.

Link: https://medium.com/analytics-vidhya/marketing-analysis-df9a019d2ec2

Overview 6:

Restauranteur Portfolio:

Overview:

This project is a professional portfolio for a restauranteur.

Task:

Increase the visibility of Chef Jayden Tega

Methodology:

This project was done using HTML, CSS and Javascript with addition of J-Query for some functionality and animate on scroll for animations.

Conclusion:

This project was done during my internship at HNG.

Link: https://restauranteur.netlify.app/

Overview 7:

Web 3 is gaining both traction and acceptance amongst the tech-sphere and the business world. Every industry is jumping into the hype including the gaming world.

Overview:

This is a simple game built and deployed on the Ethereum blockchain.

Methodology:

The smart contract was written using solidity with user interface implemented using react and deployed to the Ethereum testnet.

Conclusion:

This is a fun simple NFT game character minting, a way of inching my way into web 3 and gaming.

Link: <https://metaverse-slayer.netlify.app/>

Contact Card;

My name is Rosemary, a computer programmer and a junior majoring in computer science with interest in the intersection of machine learning and web 3.

Where to find me:

[Nwosunneoma@gmail.com](mailto:Nwosunneoma@gmail.com)

Social: