

Group 13

1.Title:

NFT marketplace Application using Next.js

Introduction to the problem statement:

- NFT will continue to gain prominence in 2022 and is growing as a new asset class in the crypto space. There should be an efficient exchange medium for NFTs.
- NFT marketplaces are focused on selling specific assets. For example, the Valuables NFT marketplace allows users to buy and sell tweets.
- The possibilities of NFTs are endless, since they can be used to log ownership of any unique assets.
- In this Project we will develop a Full-Stack application using Next.js for NFT trading and secure transactions via blockchain.

Abstract:

Non-fungible tokens (NFT) are an emerging technology that has already seen a ton of use cases outside the typical NFT application – which right now is mostly for trading artworks and game characters.

At its core, an NFT is a tool that creates non-fungible digital assets using blockchain. There are two major benefits that can be gained from these features. Primarily, NFT offers the certification of ownership. With blockchain-based NFT, the record of ownership is protected from changes or modification. This makes a digital asset to only have one official owner at a time. Subsequently, consumers do not have to worry about the risk of counterfeiting.

Approach:

The Web application is developed using Next.js and for the Authentication we use Metamask and Third webhooks.

2.Title:

Predicting Consumer Purchase intention using Twitter Data

Introduction to the problem statement:

A web application that predicts the likelihood/certainty that a customer will buy a product that he is interested in based on his social media posts such as Twitter tweets and user profile data. This will help the company/business target a particular customer more efficiently and boost their sales.

Abstract:

We can try searching for Twitter tweets of potential customers wanting to buy a product. And based on those tweets we estimate/predict the likelihood that the customer will buy the product. Will then make a model by gathering tweets from users who have already expressed intention to buy the product using their tweet history. And based on the training data the model estimates a prediction/likelihood of whether the customer will buy it or not. We have limited the scope of our data to only mobile phones. Our model predicts the consumer intention for the latest upcoming mobile phones.

Approach:

Creating Process model and Web application Dashboard

Persona:

Predicting Consumer Purchase intention using Twitter Data showing Dashboards, Charts, Analytics, and predicted customers.

Below are the steps:

- Data Acquisition and preprocessing
- The process model
- Predict customer intention
- Application
- View Dashboard

Dataset links:

Naive bayes algorithm
dataset-<https://www.kaggle.com/prashant111/naive-bayes-classifier-in-python>

2.Title:

Web Application for Real time sign language prediction

Introduction to the problem statement:

Conversing with people having a hearing disability is a major challenge. Deaf and Mute people use hand gesture sign language to communicate, hence normal people face problems in recognizing their language by signs made. Hence there is a need for systems that recognize the different signs and conveys the information to normal people.

Abstract:

Sign language recognition is a problem that has been addressed in research for years. However, we are still far from finding a complete solution available in our society.

Vision is a key factor in sign language, and every sign language is intended to be understood by one person located in front of the other, from this perspective, a gesture can be completely observable.

Viewing a gesture from another perspective makes it difficult or almost impossible to be understood since every finger position and movement will not be observable.

Trying to understand sign language from a first-vision perspective has the same limitations, some gestures will end up looking the same way. But, this ambiguity can be solved by an efficient deep learning algorithm.

Approach:

We will leverage a keypoint detection model to build a sequence of keypoints in the hand gesture dataset which can then be passed to an action detection model to decode sign language. As part of the model building process we will use Tensorflow and Keras to build a deep neural network that uses LSTM layers to handle the sequence of keypoints.