Gyanendra Singh

Machine learning and Data Science





Greater Noida, Uttar Pradesh



EDUCATION

Bachelor of Technology in Computer Science and Engineering

Artificial Intelligence and Data Science

Noida Institute of Engineering and Technology



September 2020 – current



Greater Noida, GB Nagar, Uttar Pradesh



Score 7.8 CGPA in overall past 5 semesters

Higher Secondary Schooling PCM



Score 60% in class 12th and 80% in class 10th

SKILLS

- EDA, Data Preprocessing and **Feature Engineering**
- Machine Learning, Artificial Intelligence, Data Science and **Deep Learning**
- **Data Analytics**
- NLP (Natural Language Processing)
- TensorFlow & Keras, SciKit Learn
- Python, Java, MySQL
- NumPy, Pandas, Matplotlib, Seaborn
- HTML, CSS, JavaScript
- Leadership Experience and team **Building Capability**

PROJECTS

Face Mask Detection Using CNN

It helps to detect the faces who wear proper mask, incorrect mask and without mask.

- In Covid times government says to all the peoples to wear proper mask so that they cover at least mouth and nose area but some of them do not wear mask in proper way and some of are not wear any mask. Government officers put more and more effort to identify these kinds of people in mall or any public place.
- This project help to identify the faces who do not wear proper mask or not wear any mask through lie or recorded video and put red circle on those faces.
- This model is designed using CNN (Convolutional Neural Network).
- We trained the model on Kaggle facemask dataset and achieved the training accuracy about 97.5% and testing accuracy around 91.3% which good enough to predict the masked face.

Hollywood Movie Recommendation

This recommendation system shows all the necessary information about movie and recommends the top 5 movies that are similar with them. This project is partially dependent on machine learning methods but require lots of data preprocessing and features extraction.

- As we all use the Amazon Prime or Netflix OTT platform which show the details of movie and other necessary things.
- In this project, we build our own recommendation system who recommend the movie around the current searched movie.
- It shows the full information about the movie with their actors and director who worked in that movie also.
- I build this system and deploy on Heroku which look like a full website.

Email/SMS Spam Detection

It can easily detection detect and classify the spam mail and message with good precision and accuracy.

- All the unnecessary and spam mail that we received in your mail account is so irritating for us when we find some important mail.
- We apply some supervised machine learning algorithm on the dataset of mail or message an build the model which can solve our problem and separate all the spam mail from our important mail box.
- The initial accuracy and precision is about 87%, 57% but after using another algorithm and preprocessing the accuracy and precision is achieved about 98%, 99% respectively.
- This model is also deployed on Heroku platform in the website from.

CERTIFICATIONS

- <u>Convolutions for Text</u> <u>Classification with Keras</u>
- Introduction to Deep
 Learning & Neural Networks
 with Keras
- Machine Learning with Python
- Python 101 for Data Science
- Summer Training on Core and Advanced Java

Coding Platform

- <u>LeetCode:</u>
 https://leetcode.com/GYANENDRA2003/
- CodeChef:
 https://www.codechef.com/users/gyanendra1999

<u>Stock Market Sentiment Analysis using News</u> <u>Headlines</u>

It predicts the fluctuation in the stock price by analyzing the daily basis news headlines whether the price is rises up or goes down. It is a NLP (Natural Language Processing) based project.

- Nowadays, most of the youngster investing the money stock market and gain profit or even sometimes they have faced some amount of loss also. As a human it is not possible to read the all the daily news headlines so that they can make more profit.
- At that time our model comes in the role and predict the today's rise
 or fall in the price of stocks by analyzing the current day headlines and
 aware the investors before the investing the valuable money.
- The initial accuracy our model is only 54% but after data preprocessing and using LSTM algorithm the accuracy is going about 85%-90% which is pretty good for time series forecasting.

Speech Emotion Recognition Using LSTM

It detects and capture the emotion in the voice of a human being whether the mood of the speaker is happy, sad, surprise, neutral etc.

- In the call center department, the customer care faces a big problem which is to know the sentiment and mood of the speaker so that they can convey our message more confident.
- For solving this problem, this model will help the customer care to knowing the current mood of the speaker by its voice record. It is good for both of them and increase the work productivity and reduce wastage of time.
- We uses the LSTM algorithm for the model building and trained on the dataset.
- The accuracy of this model is around 99%-100% for both the training and the testing date which is awesome for model prediction.