Sarcasm Detection Using NLP And ML

Project Id: 05

Name	SRN
Pawan Prasad P	PES2UG19CS280
Phani Kumar Vedurumudi	PES2UG19CS281
Rithika Reddy Kara	PES2UG19CS331

This Project is used to determine whether the given text or sentence is sarcastic or not. Sarcasm refers to the use of words that mean the opposite of what you really want to say, especially in order to insult someone, or to show irritation, or just to be funny. A basic detector which is used to find whether a text is sarcastic or not based on the sarcastic word present in the text. The two main models used in this project are GloVe Model and LSTM Model for sarcasm detection. The project aim is to find a more accurate and precise way of predicting whether the sentence is sarcastic or not using ML model. The main aim is to increase the accuracy rate in the prediction.

Installation of the required libraries and pre-trained model:

pip install numpy

pip install pandas

pip install matplotlib (for Data Visualization)

pip install re

pip install tensorflow (for ML Models)

pip install -U nltk (for nlp related libraries)

pip install wordcloud (for generating the visualization of sarcastic word)

Download twitter GloVe model : https://github.com/stanfordnlp/GloVe

Dataset Link : https://www.kaggle.com/datasets/rmisra/news-headlines-dataset-for-sarcasm-detection

Execution:

1. Install all the above mentioned libraries and GloVe Model.
2. Move the downloaded GloVe Model, Dataset and the jupyter notebook file in the same directory.
3. Run the given jupyter notebook file.