

YOUTUBE TRENDING VIDEOS ANALYSIS AND MEASUREMENT

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Abstract: Online video streaming platforms are heavily used nowadays. Websites such as YouTube offers content creators a great platform to share their knowledge, ideas and interesting information to their viewers. For a video to reach to maximum people, YouTube offers a trending page on website that shows videos which are trending at that particular time. Other than few viral videos that achieve high view count which are predictable to end up in trending section, rest of the videos cannot be predicted. Corporate companies are using social media for improving their businesses, the data mining and analysis are very important in these days. This paper deals with analysis of YouTube Data on Trending Videos. The analysis is done using user features such as Views, Comments, Likes, and Dislikes. Analysis can be performed using algorithms like Linear Regression, classification and navi bayes algorithm and python libraries like pandas, matplotlib library to classify the YouTube Data and obtain useful information.

Keywords: YouTube trending, Trending videos, likes.

I.INTRODUCTION

YouTube is a video sharing platform that provides content for users to enjoy, especially in the types of videos published by content providers. Available content includes video clips, TV program clips, music videos, short films and documentary, audio recordings, movie trailers, live streaming, video blogs, and original short videos. Most of the content is produced by individuals, but media companies also publish videos. In addition to viewing and uploading content, registered users can comment on videos, like and dislike them, create playlists, and subscribe to other users. YouTube is also the second most viewed website in the world since 2021. YouTube is the largest online video sharing platform in the world. YouTube which was launched in 2005 has now become universal in itself. With over 4 billion views a day YouTube is the perfect platform for user-generated content. YouTube offers interactive video features for community creators and content as views, reflecting the total number of viewers collected by a particular video to date. Generally, the number of views determines the popularity of the videos and takes some time for the video to become popular. There is always a lot of attractive content in the short term and such content falls under the category of trending videos on YouTube. Although trending videos may not be considered popular when placed under the trending tab on YouTube, they have the potential to become popular in the future. Despite its importance the trending videos on YouTube are not yet well-reviewed. Considering that over a billion different users visit YouTube each month and 72 hours of video are uploaded to YouTube per minute, it has become one of the biggest business forums. presented. Whenever a video gets popular, it is made available to a large number of free viewers and gets people's attention for a while. It is difficult to track which content is likely to be in the near future or that may be popular, which is why predictable analysis is introduced using Machine Learning.

II.LITERATURE SURVEY

Swati Gayakwad, Rajas Patankar [1] Analysis on YouTube Trending Videos: They are fining only best time to upload the videos on YouTube, it is not enough to get number of views for yours videos to became a trend and also they find the string length of the each title for trending videos and also essitimate what is the average title length for trending videos.

Iman Barjastet [2] Trending videos Measurement and Analysis: In this they are finding and measuring analyzing the trending videos. they are taking more than 8000 videos an aggregate time on last three months. And also they are find 56% of the uploader are male and also they find the number of subscriber count of the trending channel.

G. Mohana Prabha, B. Madhumitha [3] Predicting the popularity of trending videos in YouTube using Sentimental analysis: Classification and detection of Sentiment of user remarks in YouTube is difficult to research the data. primarily based on the text review which are getting from social networking website.SVM classifies which is used to effect in sentiment analysis with accuracy.

Johanes Andry,[4] Algorithm of Trending videos on YouTube Analysis using classification Association and Clustering. Analyzing the basic statistics of all videos and describe the important attribute from dataset are they are finding the best title of upload videos and show the channel title that upload the videos and show the number of views of that trending videos.

Renjie Zhou, Samamon Khemmart,[5] The Impact of YouTube Recommendation System on videos Views. They perform measurement study on the impact of related videos recommendation system on videos .views through the measurement of views source we find that the related videos recommendation accounts for about 30% overall views by investingation how videos views are driven by the recommendation system and they find a strong correlation between the views counts of a videos and the average view count of its top refferer videos.

Pushpa Srivastava [6] 6 tips to make your video trending on YouTube: A good YouTube video marketing strategy can keep your brand on the top of your audience’s mind. Create longer, engaging content to maximize your view duration, focus on meta descriptions and eye-catching thumbnails, and finally upload on a regular cadence.

III. PROPOSED SYSTEM

Trending videos are declared as such several hours after they are uploaded, we are able to analyze trending videos time series across critical and long duration of lifecycle. The proposed work of naives byes classification offer stepped forward effects in sentiment analysis with accuracy in actual time environments.

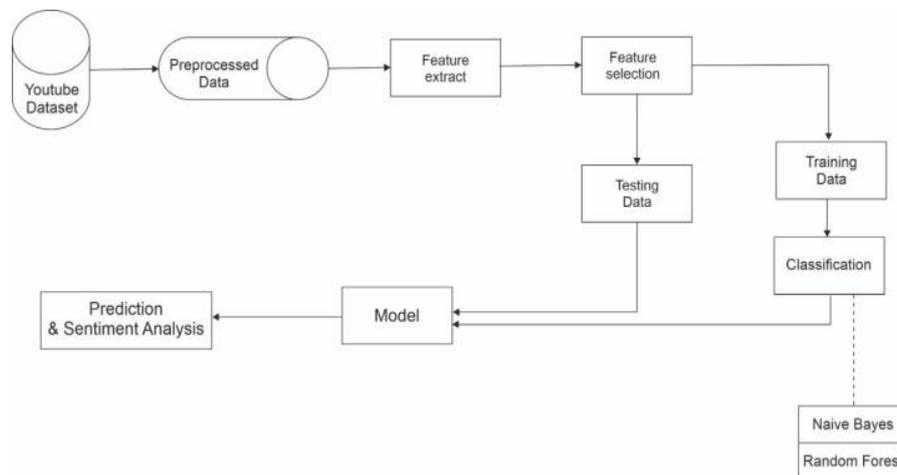


Fig 1 Proposed methodology Architecture

IMPLEMENTATION AND PROCESS

1. Naive Bayes Classification

Predicated on Bayes Theorem with notional theorization impartial amongst analyst, the Naïve Bayes type approach comes into photo. In facile language, a Verdant Bayes classifier postulates the presence of a culled article in a category is unrelated to the subsistence of every other characteristic. The Verdant Bayesian classifier is predicated on Bayes’ theorem with independence posits between presages. An Ingenuous Bayesian version is facile to construct, without an intricate iterative parameter estimation which makes it specially utilizable for terribly immensely colossal datasets.

2. Dataset

Dataset contains 40000 samples in every column except column description. Description column contains some null values. Also, study analyzed that dates columns trending date and publish time have object as their data type instead of a date time format. Research plotted graph of certain variables to understand the distribution of data samples. Graph shows the variables like views, likes, dislikes, comment count have a very right skewed/positive graph as some of the values lie far right under the curve. Also, variables such as comments disabled, ratings disabled have one class significantly larger than others. By counting the channels and number of trending videos we can find out which channels produce the most trending videos. This can be done using functions from panda libraries in a database that contains the number of times a channel has been in the trending category.

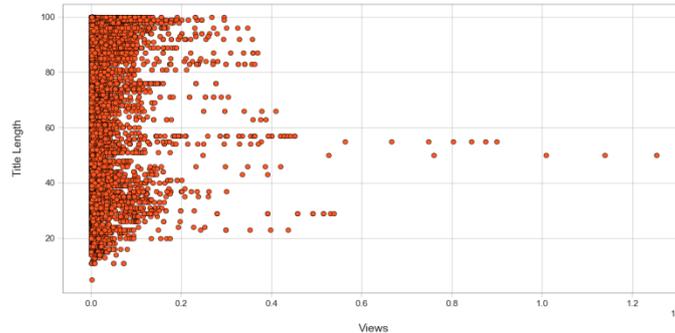
IV. EXPERIMENTAL RESULTS AND IMPLEMENTATION**1. Analysis on video length**

Fig 1. Title length character for each view count in scatter plot

The above figure 1 Represent With the help of an anaconda and other libraries we can easily calculate the unit length of the title of each of the trending videos and estimate what the average title length of the trending video is. title length between 30 and 60 characters approximately. Based on this uploader can upload video title length from the 30 to 60 can gain more number of views and likes.

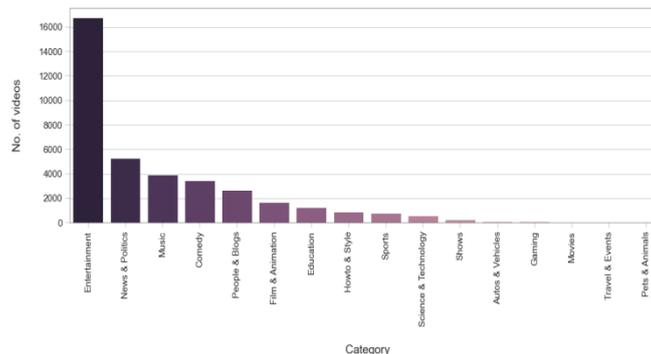
2. Analysis on category

Fig 2. Shows the channels which have largest number of trending videos

The above Fig 2 Represent Machine learning algorithms such as categorization can be used to separate video categories by themselves number of trending videos calculated to understand which The category has many trending videos. Based on this uploader can upload more number of entertainment videos in YouTube videos they can gain more number of views and likes.

3. Analysis on keywords

Fig 3 Shows most used keywords in trending videos

The above Fig 3 Represent With the help of the python library and pandas we can find the most common words in video titles after removing common plot words such as subtitles, extensions and compound words such as, a, the, but

etc. Ignoring words like "the" and "of", we realize that the symbols "|" and "-" occurred several times in the series of trending videos 11452 to 10663 times. Common names in the Trendy video titles we have identified are "Trailer", "How", "and" Videos " so uploader can easily catches viewer's attention.

V CONCLUSION

We presented our findings measuring, analyzing, and comparing key features of YouTube Trending Videos. Just so you know the best day to load video on YouTube is not enough to make millions views to make your videos a trend. There are other factors to consider for Good, Good Degrees thumbnails, video SEO, appropriate tagging, and number of subscribers are all the key features that create their views your content. Understanding these Statistics will not only help YouTube is developing better video processing algorithms however and you benefit from making individual YouTube's decisions. Youtube Popularity Prediction these of Sentiment Analysis on Social Network for customers, waiting for the popularity of videos in between several events, educational content and the main exception based on text reviews.

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