A Novel Approach for Micro Blogs: Twitter Contents Based Sentiment Analysis and Prediction System using Deep Learning Techniques

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***Abstract* :This paper tries to point out flashy topics in social data with the help of unsupervised classification methods. we, as a team going to bring focus on subjective states such as affect, attitude, denial, rejection as COVID-19 brought lot of challenges and we have to deal with it. We propose needful, an interactive and scalable tweet analysis platform, to help governments and municipalities to understand residents' real psychological needs during those periods. Here the platform mainly consists of four parts of module as data collection module, data storage module, data analysis module and visualization module. Through comparing with the method of simply preprocessing data, the results show that their approach can improve the performance of micro-blog sentiment classification effectively and efficiently.**

Keywords: Unsupervised, Covid, tweet analysis, micro-blog sentiment classification etc.,

I.INTRODUCTION

Micro-blog has been popular for many years because a lot of comments are generated explosively every day. These comments contain the public's opinions on various topics, which have wide application in both academic and industrial fields. In recent years, deep learning and some classification algorithms have been applied to sentiment analysis, and good results are achieved. Micro-blog messages are short and noisy, and contain massive user- invented acronyms and informal words. Unfortunately, most researchers pay more attention to analyse the data after deep learning, but only simply remove the noisy data before using algorithm, so the result of sentiment analysis has reached a bottleneck. Here, the authors initially purify the information victimization varied ways before deep learning, then the support vector machine(svm) classification of micro-blog victimization many sorts of options.

SCOPE:

In the min available time and limited resources, networking helps a lot to accomplish the project economically by prompting design, planning, co-ordination, control as well as in decision making.

OBJECTIVE:

The objectives of the study are first, to study the sentiment analysis in microblogging which in view to analyze feedback from a customer of an organization's product; and second, is to develop a program for customers' review on a product which allows an organization or individual to sentiment and analyzes a vast amount of tweets into a useful format.

II.LITERATURE REVIEW

S.No	Author	Title	Description
1	S.Uma Maheswari and S.S.Dhenakaran	Aspect based fuzzy logic sentiment analysis on social media big data	The research work focuses on analyzing the problems of customer on buying quality products
2	Deepak Uniyal and	Social media emerging as a Third eye !! Decording users sentiment on Government policy: A Case Study of GST.	Analysis made on public sentiments on the goods and services tax popularly known as GST in India integrating the absolute indirect tax framework in the country which paved the way for varied opinions imperative to analyze the collective sentiment
3	Valentina Dragos,	Trend analysis in online data with unsupervised classification and appraisal categories.	Here, hybrid approach uses jointly unsupervised methods for text classification and an ontology of appraisal categories

III. EXISTING SYSTEM

Existing system works only on the dataset which is constrained to a particular topic.

- The existing systems also do not determine the measure of impact the results determined can have on the particular field taken into consideration and it does not allow retrieval of data based on the query entered by the user i.e. it has constrained scope.
- In simple words, it works on static data rather than dynamic data.

● Apriori algorithm fails to handle large datasets and as a result can generate faulty results.

DEMERITS:

● Existing system takes a stored dataset on a particular topic into consideration.
● It fails to determine the impact the results might or will have in the respective field.
● Existing system does not allow the retrieval of data based on the query entered by user.
● Existing system does not provide accurate feature selection.

IV.PROPOSED SYSTEM

- In the proposed system, we will retrieve tweets from twitter using twitter API based on the query.
- The collected tweets will be subjected to preprocessing.
- We will then apply the unsupervised algorithm on the stored data.
- The unsupervised algorithm used in our system is Support Vector Machine (SVM).
- The results of the algorithms i.e. the sentiment are going to be portrayed in graphical manner (pie charts/bar charts).
- The proposed system is more effective than the existing one.
- This is because we will be able to know how the statistics determined from the representation of the result can have an impact in a particular field.

MERITS :

- Proposed system will gives you the freedom to choose the data of any topic.
- Here, it gives you the impact the results and statistics will have on the respective field.
- Proposed system allows retrieval of data based on the query entered by the user.
- Proposed system Will provide accurate feature selection.

V.SYSTEM ARCHITECTURE

VI. SYSTEM MODULES

Unsupervised Classification :

Primary steps in sentiment analysis are a classification of review text. The approach involves classifying review text into two forms namely positive and negative.

Opinion Retrieval :

It is the procedure of collection review text from review sites. completely different review websites contain reviews for merchandise, movies, hotels and news.

Information retrieval :

Techniques like net crawler are often used to gather the review text knowledge from several sources and store them in a very info. This step involves retrieval of reviews, micro-blogs and comments by user.

Opinion observer :

This is Associate in Nursing opinion mining system that is employed to investigate and compare completely different opinions by victimisation user generate the contents. this method illustrates the leads to a graph format clearly showing opinion of the merchandise feature by feature

Data Summarization :

Summarization of opinion could be a major character within the opinion mining method. outline of reviews provided ought to be supported options or subtopics that square measure mentioned within the reviews. several works are done on account of product.

APPLICATION :

1. Contextual social network analysis
2. Social media monitoring and analysis
3. Security and privacy in social networks

VII. CONCLUSION

❏ Sentiment analysis has become an important factor in decision making process in a particular field.
❏ In this paper we discussed techniques for preprocessing and information retrieval of tweets through twitter.
❏ Also we studied about the supervised learning technique: Support Vector Machine for text categorization which can be used to find out the polarity of textual tweet.

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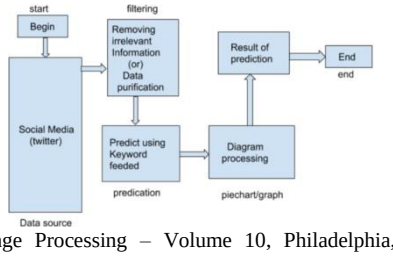

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