Prediction Social Emotions from Reader's Perspective

[#1]Swati S. Rajure, [#2]Sunil Deokule

[1]swatirajure74@gmail.com
[2]sunildeokule@gmail.com

[#12]Department of Computer Engineering,

SRCOE, Lonikand, Pune, India

ABSTRACT

Due to the huge development of social media and many networking platform, large numbers of data got generated and documents are created by showing reader's emotions. Differentiating to the previous studies which focused on author's perspective, our research focuses on readers' emotions. Our research provides meaningful assistance in social media application such as sentiment retrieval, opinion summarization and election prediction. In this paper, we predict the reader's emotion of networking based on the social media. More specifically, we construct the opinion network based on the semantic. The communities in the news network indicate specific events which are related to the emotions. Therefore, the opinion network serves as the lexicon between events and corresponding emotions. We leverage neighbor relationship in network to predict readers' emotions. As a result, our methods obtain better result than the state-of-the-art methods. Moreover, we developed a growing strategy to prune the network for practical application. The experiment verifies the rationality of the reduction for application.

Keywords: Perspective, Retrieval, Emotions, Prediction.

ARTICLE INFO

I. INTRODUCTION

Cloud Twitter has emerged as a major micro-blogging website, having over 100 million users generating over 500 million tweets every day, with such large audience, Twitter has consistently attracted users to convey their opinions and perspective about any issue, brand, company or any other topic of interest. Due to this reason, Twitter is used as an informative source by many organizations, institutions and companies. On Twitter, users are allowed to share their opinions in the form of tweets, using only 140 characters. This leads to people compacting their statements by using slang, abbreviations, emoticons, short forms etc. Along with this, people convey their opinions by using sarcasm and polysemy. Hence it is justified to term the Twitter language as unstructured. In order to extract sentiment from tweets, sentiment analysis is used. The results from this can be used in many areas like analyzing and monitoring changes of sentiment with an event, sentiments regarding a particular brand or release of a particular product, analyzing public view of government policies etc. A lot of research has been done on Twitter data in order to classify the tweets and analyze the results. In this project we aim to predict the sentiments from tweets by checking the polarity of tweets as positive, negative or irrelevant.

II. OBJECTIVE

The vital objectives of proposed system is as follows:- Design a real-time detection system for traffic analysis. The aim is to assign suitable class label to every tweet, as related with an activity of traffic event or not. It performs a multi-class classification, which recognizes non-traffic, traffic due to congestion or crash, and traffic due to external events. It detects the traffic events in real-time and It is developed.

III. LITERATURE SURVEY

[1] Beakcheol Jang, and Jungwon Yoon, "Characteristics Analysis of Data from News and Social Network Services", 2018.

Author conducted comprehensive measurements to understand the characteristics, including similarities and differences, of data from the news and SNSs. The observed differences are as follows: It is challenging to find the same topic in the news and SNS. The news responds to official events whereas SNSs respond to personal interests. The news mentions a specific topic continually, whereas the transition from one topic to another in SNSs is fast. The issues discussed on SNSs are different every day. The news can identify specific events with a single keyword, but many keywords are required to find the required data in SNSs.

[2] Ying Fang And Jun Zhang, "Multi-Strategy Sentiment Analysis of Consumer Reviews Based on Semantic Fuzziness", 2018.

New method for the calculation of polarities and strengths of Chinese sentiment phrases is proposed in this study, which could be used to analyze semantic fuzziness of Chinese.
It uses a probability value, rather than a _xed value for the polarity strengths of sentiment phrases, compared with the conventional methods.

[3] Mondher Bouazizi And Tomoaki Ohtsuki, "A Pattern-Based Approach for Multi-Class Sentiment Analysis in Twitter", 2017.

We have proposed a new approach for sentiment analysis, where a set of tweets is to be classified into 7 different classes. The obtained results show some potential: the accuracy obtained for multi-class sentiment analysis in the data set used was 60.2%. However, we believe that a more optimized training set would present better performances.

[4] Aldo Hernández, "Security Attack Prediction Based on User Sentiment Analysis of Twitter Data Victor Sanchez", 2016. cPGCON 2019 (Post Graduate Conference for Computer Engineering)

Paper proposed a sentiment analysis method for tweets based on a linear regression model. The method employs natural language processing analysis on a collected corpus and determines negative sentiments within a specific context. The objective is to predict the response of specific groups involved in hacking activism when the sentiment is negative enough among different Twitter users.

IV. PROPOSED METHODOLOGY

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 various patterns and strategic algorithms including some of data mining learning algorithms for NLP to supervise the data. The results of the algorithms i.e. the sentiment and influence will be represented 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 as well as influence of negativity spread by fake tweets.
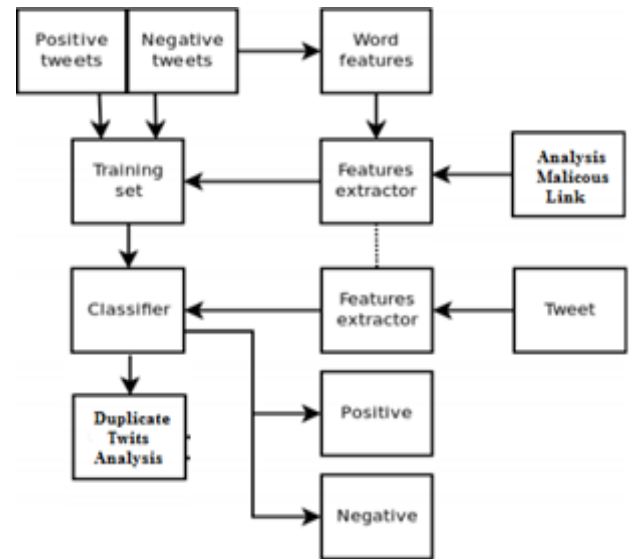
A. Architecture

Fig. 1. Architecture Diagram

V. CONCLUSIONS

The project set out to solve a practical problem of sentiment analysis and genuinely check of Twitter posts. We proposed a method using knowledge base patterns, strategies and machine learning approaches. These methods are proposed to increase the accuracy of sentiment check for tweets. Patterns can be used to evaluate if the tweets was a influenced fake tweet or a genuine post by any user. By using API of twitter it is possible to work on live tweets than to work on offline data. Querying and fetching of particular tweets from twitter is possible by using its API.

REFERENCES

[1] Beakcheol Jang and Jungwon Yoon "Characteristics Analysis of Data from News and Social Network Services" DOI 10.1109/ACCESS.2018.2818792, IEEE.

[2] HAI TAN AND JUN ZHANG "Multi-Strategy Sentiment Analysis of Consumer Reviews Based on Semantic Fuzziness" 2169-3536 2018 IEEE.

[3] MONDHER BOUAZIZI AND TOMOAKI OHTSUKI, "A Pattern-Based Approach for Multi-Class Sentiment Analysis in Twitter" 2169-3536 2017 IEEE.

[4] Aldo Hernández, Victor Sanchez "Security Attack Prediction Based on User Sentiment Analysis of Twitter Data" 978-1-4673- 8075-1/16/$31.00 2016 IEEE.

[5] Manju Venugopalan and Deepa Gupta "Exploring Sentiment Analysis on Twitter Data" 978-1-4673-7948-9/15/$31.00, 2015 IEEE.

[6] Rincy Jose and Varghese S Chooralil "Prediction of Election Result by Enhanced Sentiment Analysis on Twitter Data using Word Sense Disambiguation" 978-1-4673-7349-4/15/$31.00, 2015 IEEE.

[7] Anurag P. Jain and Mr. Vijay D. Katkar "Sentiments Analysis Of Twitter Data Using Data Mining" 978-1-4673-7758-4/15/$31.00, 2015 IEEE.