iJRASET
International Journal For Research in Applied Science and Engineering Technology



INTERNATIONAL JOURNAL FOR RESEARCH

IN APPLIED SCIENCE & ENGINEERING TECHNOLOGY

Volume: 5 **Issue:** XI **Month of publication:** November 2017

DOI: http://doi.org/10.22214/ijraset.2017.11014

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International Journal for Research in Applied Science & Engineering Technology (IJRASET)
ISSN: 2321-9653; IC Value: 45.98; SJ Impact Factor:6.887
Volume 5 Issue X1, November 2017- Available at www.ijraset.com

Us Elections Sentimental Analysis

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Abstract: ***The United States elections 2016 has seen an unprecedented amount of media coverage, numerous presidential candidates, and acrimonious debates over wide ranging topics from candidates of both the republic and democratic party. In contrast to the expectations Donald Trump surprisingly won the elections. Experts analyzed that the social networking sites like Facebook, Twitter and big data analytics rather than traditional approach helped Donald Trump to win the elections.***
In this project, Data Science and Big Data Analytics is used to analyze how the tweets in Twitter impacted US Elections. This project is an application of Sentimental Analysis also known as Opinion Mining using R Programming to perform text mining and opinion analysis on tweets collected during the US Election time.
Keywords: US Elections, Donald Trump, Big Data, Twitter.

I. INTRODUCTION

The value of Twitter in recent years has risen as businesses, political groups and curious internet users alike have begun to assess the public's general sentiment for his or her merchandise and services from Twitter posts. Sentiment analysis provides a way of pursuit opinions and attitudes on the net and determines if they are completely or negatively received by the final public. the aim of Text mining is to technique unstructured (textual) knowledge and to extract pregnant numeric indices from the text, allowing the applying of varied processing algorithms to elucidate the matter data set.
Sentiment analysis (or opinion mining) refers to natural language processing method, text analysis and linguistics to identify and extract subjective knowledge at intervals the provision material.

II. LITERATURE REVIEW

Twitter is totally different to alternative styles of data that square measure used for sentiment analysis as sentiments square measure sent in one or two sentence blurbs instead of paragraphs. Twitter is far additional informal and fewer consistent in terms of language. Users cowl a large array of topics that interest them and use several symbols like emoticons to precise their views on several aspects of their life (Agarwal et al. 2011) [1]. According to Mejova (2009)[2] Sentiment analysis is sometimes conducted between two levels; a rough level and a fine level. Coarse level sentiment analysis deals with crucial the sentiment of a whole document and Fine level deals with attribute level sentiment analysis. Neethu, Rajasree (2013) [3] Sentence level sentiment analysis comes in between this two. Sentiment analysis in Twitter provides a dramatically totally different knowledge set wherever multiple attention-grabbing challenges will arise. According to Boiyetal (2007), Symbolic techniques and Machine Learning techniques square measure the two basic methodologies utilized in sentiment analysis from a text.
The next two sections handle these techniques in more detail.

A. Symbolic Techniques
B. Machine Learning Techniques

In this project, we construct a Twitter corpus using Twitter API, use R studio coding to prepossess the Twitter corpus, then using know ledge based methods we use an available lexical resource and apply it to the Twitter corpus. To compare the results from the knowledge based method to a machine learning technique we then use Naive Bayes classification models to the corpus which will split the corpus into positive and negative tweets as well as highlighting which tweets are classified. Naïve Bayes is used as it is often works well as a good first classifier in data analysis [4].

III. PROBLEM SPECIFICATION

R studio can perform a series of study on the information like information primarily based techniques that use a sentiment lexicon to work out the amount of positive and negative tweets. Machine learning techniques that measure supported a coaching set and can verify the amount of tweets that measure positive and negative.

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To construct a info of tweets on the keywords #Trump, which can be designed employing a Twitter API app.

IV. SOLUTION

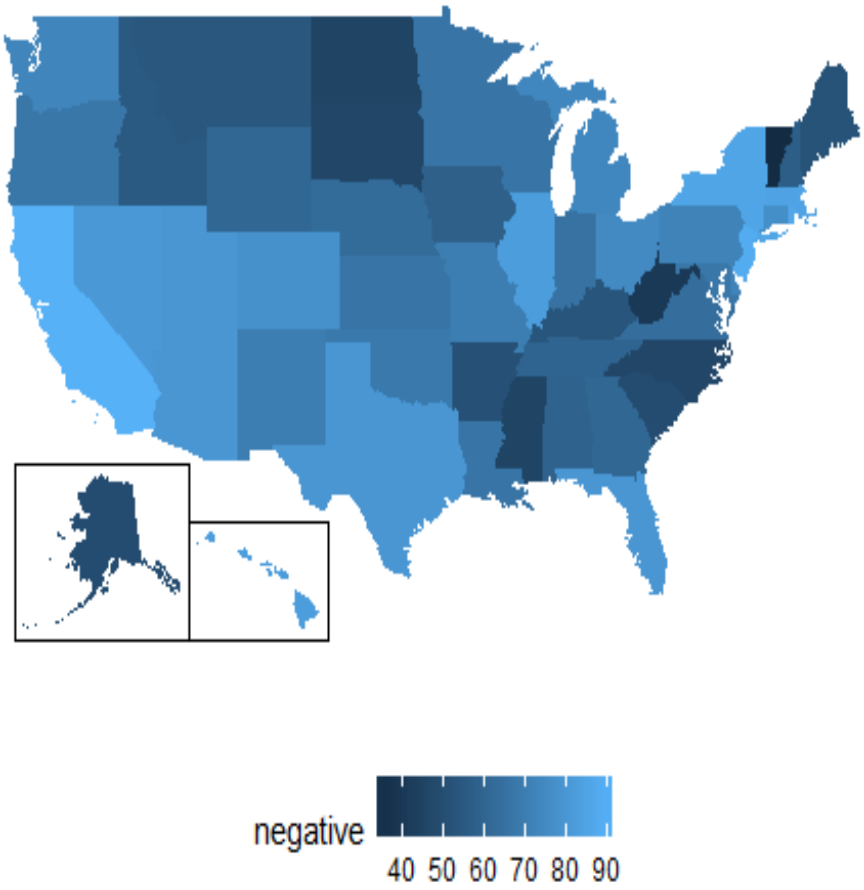
The process can begin with a purchase program applied to Twitter. Such keywords are taken from the info that is retrieved from Twitter. so as to support a derivation to a abstract level, the info segments are then fragmented, assumptive that each message can solely contain one construct. Three distinct classes are chosen as follows

Tweets are equally split into three sets of text types;

1) *Positive:* Those opinions United Nations agency favour what Trump has same or United Nations agency react completely to his proposal comments (note these texts could also be negative towards people who oppose her)
2) *Negative:* Tweets that don't seem to be in favour of what Trump has same and United Nations agency react negatively towards him (these tweets could also be positive towards different groups)
3) *Neutral:* Objective tweets or those that don't state associate degree opinion

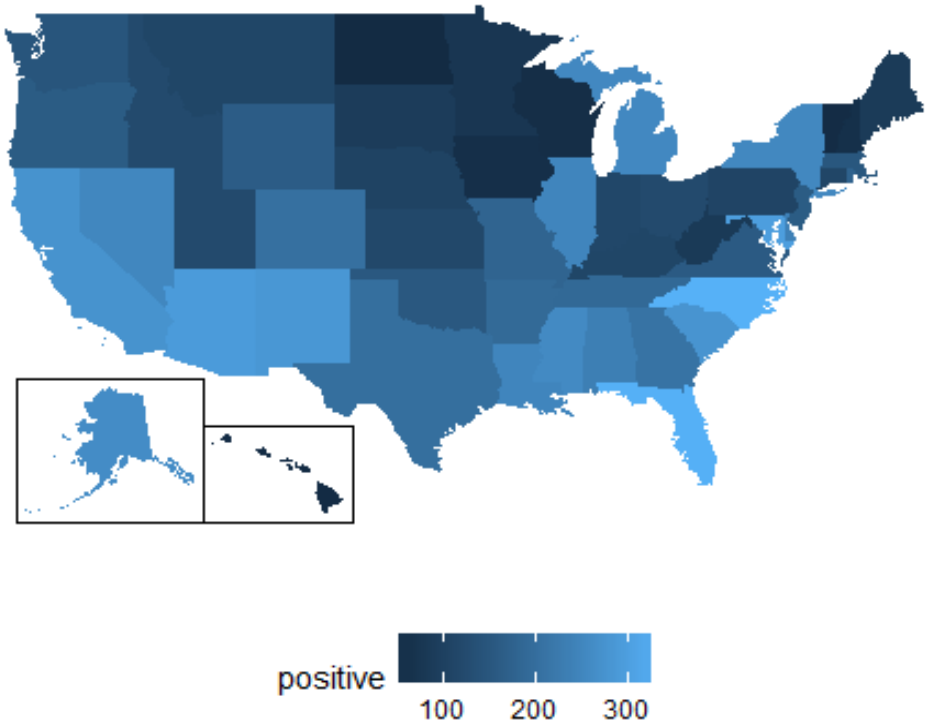
V. RESULTS

We used maps on the transformed data to analyse and understand Donald Trump's popularity in the United States based on tweets. The colour patterns are used to understand the amount of positivity and negativity in each state. Here to represent lower density in data we stick to darker colour shades and to represent high density in data we resort to lighter shades of hue. With this we would be able to analyse the amount of sentiment towards Donald Trump based on geographical locations.



By seeing the maps one can easily identify the positivity of the candidate in each state. We are using navie's bayes to find the sentiment for the tweets for past few month, posted by users from around the world in twitter, and classifying them using sentiment analysis .The map shows the negative mentions of donald trump

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VI. CONCLUSION

In this project tweets collected were classified into positive and negative categories using the machine learning classifier Naïve Bayes. The presence of white areas, punctuations, and numbers had to be confronted within the pre-processing stage. Similarly tweets are collected in the Rapid Miner and sentimental analysis is performed using Aylien Operator and results generated from these are compared.

VII. FURTHER DEVELOPMENT

The relevance of sentiment analysis for future businesses and promoting in victimization keywords and analysis of the feelings around that keyword by the general public is just reaching to increase because the quality of Twitter grows over following few years. However, in terms of long development or analysis, the power of the twitter API to drag knowledge that's older, ought to be developed likewise as another social media API's in order that sentiment analysis may well be performed over an amount of your time, particularly within the realm of social sciences wherever researchers may enquire into social and political shifts of opinion on the social media sites. Equally the shortage of modification in opinion over time on some problems may be value following as a subject of analysis for twitter sentiment analysis. The utility of such a sentiment instrument would give a noteworthy analysis of social and political problems.

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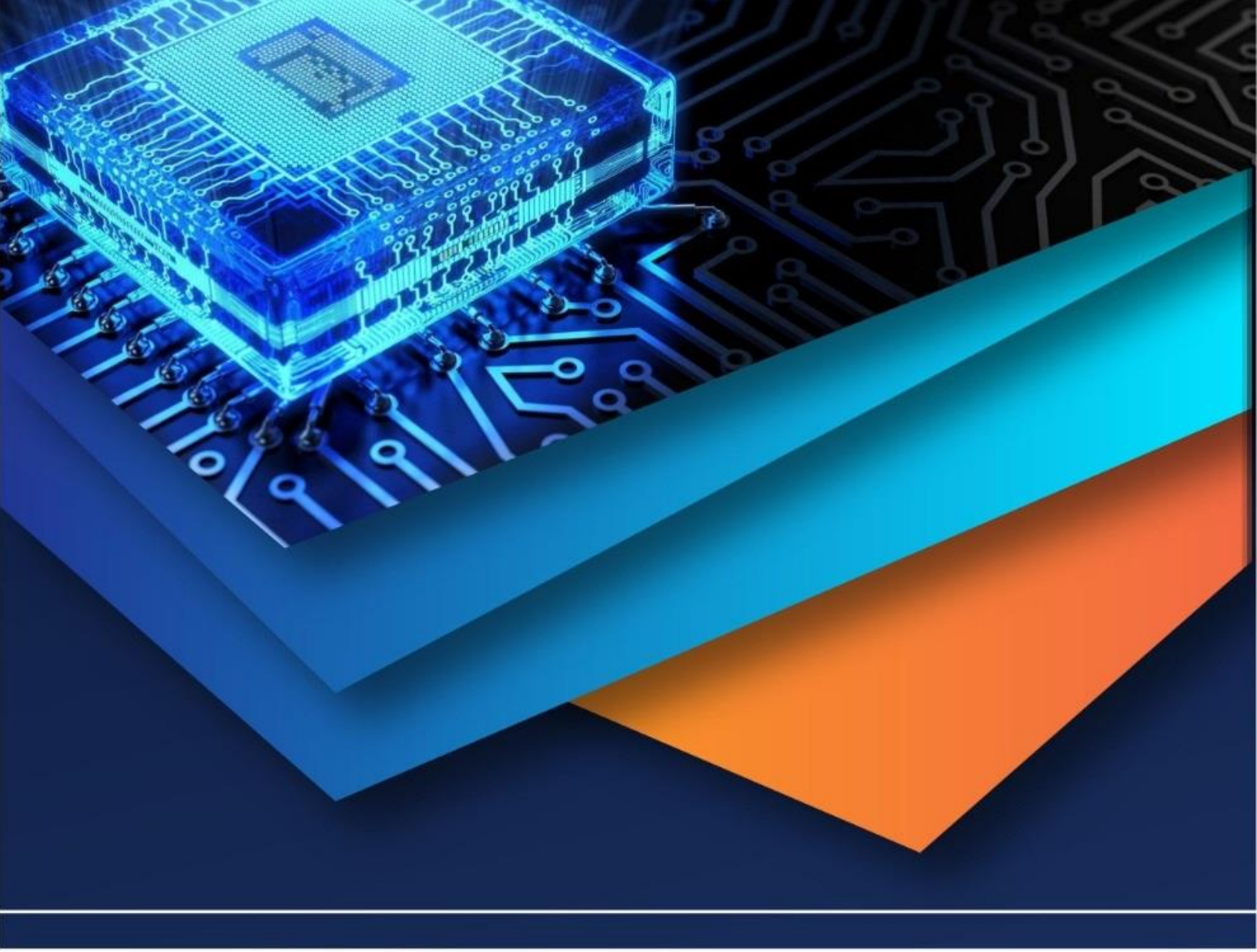
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