

Social Information and Networks

J Component Review I

ABHIRUPA MITRA- 17BCE0437

Analysis of Indian election since 1998

OBJECTIVES

- To draw a critical data analysis of the statistics obtained from the Indian general election since 1998.
- Provide twitter sentimental analysis of the Indian General Election since 2009.
- Predicting political media bias during the period of general election

MOTIVATION

The Indian general elections are held once in 5 years to elect the Member of Parliament (MP) from 541 constituencies all over the country. The political scenario in India is very dynamic and ever changing. For a country with a nearly 1.3 billion population, it will be very interesting to observe the change in political trends throughout two decades. In this domain, we will attempt to draw an analysis of the performance of political parties in elections since 1998, and plot out the trends in voter turnout.

LITERATURE SURVEY

S. No.	Paper	Author(s)	Methodology	Advantages	Drawbacks
1.	Can #Twitter_Trends Predict Election Results? Evidence from 2014 Indian General Election	Aparup Khatua Apalak Khatua Kuntal Ghosh Nabendu Chaki	Sentiment analysis of twitter data preceded by data cleaning and aggregation. This was followed by generating a heat map of the twitter data.	Domain driven data mining model has significantly improved the data collection and relevant tweet identification process. Significant portion of voters are loyal to a political ideology, sentiment score can be an effective predictor of vote swing	A better sentiment analysis might help to do a fine grained analysis between vote share and changes in vote share, which is a limitation of this study. Sentiment scores might be misleading in predicting elections results in countries like India. Time factor for data collection is also inadequate.
2.	STUDYING INDIAN POLITICS WITH LARGE-SCALE DATA: INDIAN Election Data 1961–Today	Francesca R. Jensenius, Gilles Verniers	Collecting dataset of Indian politics since 1961 general elections and studying them to draw analytical conclusions, after proper data cleaning.	Provides us with a general overview of the Indian Political scene	Conclusions are limited to rudimentary methods of analysis and raw data, since no usage of any specific algorithm has been mentioned.
3.	TWITTER	Ferdin Joe	Decision tree	Provides us	The

	<p>BASED OUTCOME PREDICTIO NS OF 2019 INDIAN</p> <p>General Elections Using Decision Tree</p>	John Joseph	<p>classifier is used to train and test data and the predicted outcome is found to be close to that of the actual outcome and most of the pre poll analysis done so far.</p>	<p>with a general overview of the Indian Political scene</p>	<p>experiments reported in this paper are only on tweets in English language and having the most number of retweets by the users. Hence there is data deficiency and biasism due to improper data representatio n.</p>
4.	Prediction of 2019 Indian Election Using Sentiment Analysis	Bharat R.Naiknawar, Seema S.Kawathekar	<p>The researchers worked on Sentiment Analysis for the purpose of prediction of 2019 Indian election. For that proposed work they used sentiment analysis score technique</p>	<p>Provides a new approach. In 2019 main elections agendas are GST, Demonetization, Digital India, Make in India, Startup India, Swacha Bharat, Kashmir and Yoga day. In this paper, they worked on prediction of the popularity of these schemes using sentiment</p>	<p>The experiments reported in this paper are only on tweets in English language and having the most number of retweets by the users. Hence there is data deficiency and biasism due to improper data representation.</p>

				analysis score method.	
5.	PREDICTION OF INDIAN ELECTION USING SENTIMENT ANALYSIS on Hindi Twitter	Parul Sharma, teng-sheng moh	The researchers worked on Sentiment Analysis for the purpose of prediction of 2019 Indian election. For that proposed work they used sentiment analysis score technique	Used Twitter Archiver tool to get tweets in Hindi language. We performed data (text) mining on 42,235 tweets collected over a period of a month that referenced five national political parties in India	The experiments reported in this paper are only on tweets in English language and having the most number of retweets by the users. Hence there is data deficiency and biasism due to improper data representation.

ISSUES IN THE EXISTING SYSTEM

- The existing papers do not give us any idea about the elections preceding 2014.
- Only 2014 and 2019 election results have been used for prediction, no particular conclusion has been drawn regarding the visible change and shift in political alliance.
- No mention has been made regarding the election to the state legislative assembly.
- Most of the papers that have been researched on doesn't take into account factors that might have affected the poll results such as demonetization.
- The existing papers do not give us any idea about the elections preceding 2014. Only 2019 election results have been used for prediction, no particular conclusion has been drawn regarding the visible change and shift in political alliance.

- No mention has been made regarding the election to the state legislative assembly.
- Most of the papers that have been researched on doesn't take into account factors that might have affected the poll results such as demonetization

PROPOSED SYSTEM

- Perform Sentiment Analysis of political twitter feed during the phase of 2009, 2014, and 2019 general election.
- Sentiment Analysis will also be performed of state legislative elections which have had an impact of the political balance of the country.
- General sentiment analysis of factors which had an effect on Indian Politics such as demonetization, GDP, division of Jammu and Kashmir
- In addition to the sentiment analysis performed, taking into consideration different factors, we are going to plot down the shifts in Indian political regime and the change in power from one general election to another.

ALGORITHM TO BE USED

Naive Bayes Algorithm Complimented with associated data analytics tools to draw out the trends in Indian political regime since 1998.

APPLICATIONS OF THE PROPOSED SYSTEM

- Helps in understanding the shift in various political beliefs and sides of people and the reason for such a change.
- Helps in analyzing the electoral needs of each party and their progress in a republic India.
- Understanding of various factors which has an effect on the political notion of the country.

NOVELTY OF THE PROPOSED SYSTEM

This research work is going to compare the trend and the shifts in the political sidings of the people of India across two decades. It also offers to study the causes in such shifts and deduce factor which have affected Indian politics. Draw an analytical conclusion regarding the observations.

REFERENCES

1. Can #Twitter_Trends Predict Election Results? Evidence from 2014 Indian General Election(Aparup Khatua Apalak Khatua Kuntal Ghosh Nabendu Chaki)
2. Studying Indian Politics with Large-scale Data: Indian Election Data 1961–Today (Francesca R. Jensenius, Gilles Verniers)
3. Twitter Based Outcome Predictions of 2019 Indian General Elections Using Decision Tree (Ferdin Joe John Joseph)
4. Prediction of 2019 Indian Election Using Sentiment Analysis(Bharat R.Naiknaware, Seema S.Kawathekar)
5. Prediction of Indian Election Using Sentiment Analysis on Hindi Twitter (Parul Sharma, Teng-sheng Moh)