

**Sarcasm Analysis On Twitter Data**Tejal Patil<sup>1</sup>, Prof. Dhanashree S. Kulkarni<sup>2</sup><sup>1</sup>(Department Of Computer Engineering, Dr. D Y Patil College Of Engineering, Ambi, Pune)<sup>2</sup>(Department Of Computer Engineering, Dr. D Y Patil College Of Engineering, Ambi, Pune)

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**Abstract:** One of the hot topics of recent years is analyzing or extracting microblog data. Analysis of feelings is one of the micro-blog data analysis techniques. Analysis of feelings refers to Identification of online courage and opinion with regard to an explicit theme or product. Sarcasm is one of the most frequently used ironies in micro-blogs or social network sites. Sarcasm is another way of transmitting information from person to person. It could be used in different ways, such as mockery of somebody. One of the key principles for enhancing data analysis and developing automatic feeling analytics is sarcasm detection. In this paper we propose an approach based on a pattern for tweet iron detection. We proposed to use a pattern-based approach to make a feeling study. We also research the significance and the price for the grouping of each proposed feature set.

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**Keywords:** Twitter, Sarcasm Detection, Sentiment Analysis, Pattern Based Approach, MachineLearning

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**I. INTRODUCTION**

These microblog sites (like Twitter, Instagram) are generating enormous amount of knowledge thanks to the increasing quality of social media. We are all aware that the internet is a huge network array. The web era has shifted people's attitude to their thought and feelings. By using social networking websites and other micro blogs, each person is linked to the other. Each person in this world prefers to check the product reviews online before purchasing it. Infect infection. Before making another one a mate, people can check the other's profile in social network sites. It's a big thing.

The normal way that the current generation followed. Twitter is one of the biggest points on the Internet that people think about, share views and exposure events. Twitter data has increased over the previous years, which is therefore a typical example Massive information allegedly. Today, Twitter has 288 billion diverse users and 500 billion tweets are sent every day, as its accredited website has been accepted. Several companies and the civil service were curious about the information in order to learn people's views about political events, films [1]the latest product [2]. In Twitter, the limitation on tweet characters is so that people prefer informally, which is difficult to understand, to write their feelings. And sarcasm makes analyzing it harder. We may conclude that, when a person says something but the strength of his or her words is different, Sarcasm[3] says in this paper that sarcasm can alter the polarity of messages through sentiment analysis. In this article we tend to suggest a method which depends on the writing patterns of sarcasms and can then identify their sarcastic tweets.

This paper has the main contributions.

- (1) We tend to propose the collection with other options for categorizing tweets of pattern-based options.
- (2) They examine how irony is primarily replicated on websites of micro blogs.
- (3) An effective way to find ironic tweets can be identified and sentiment analysis can be improved efficiently
- (4) Categorize the tweets into different modules (hypothetical classification of tweets)

**II. MOTIVATIONS AND RELATED WORK****A. Motivations**

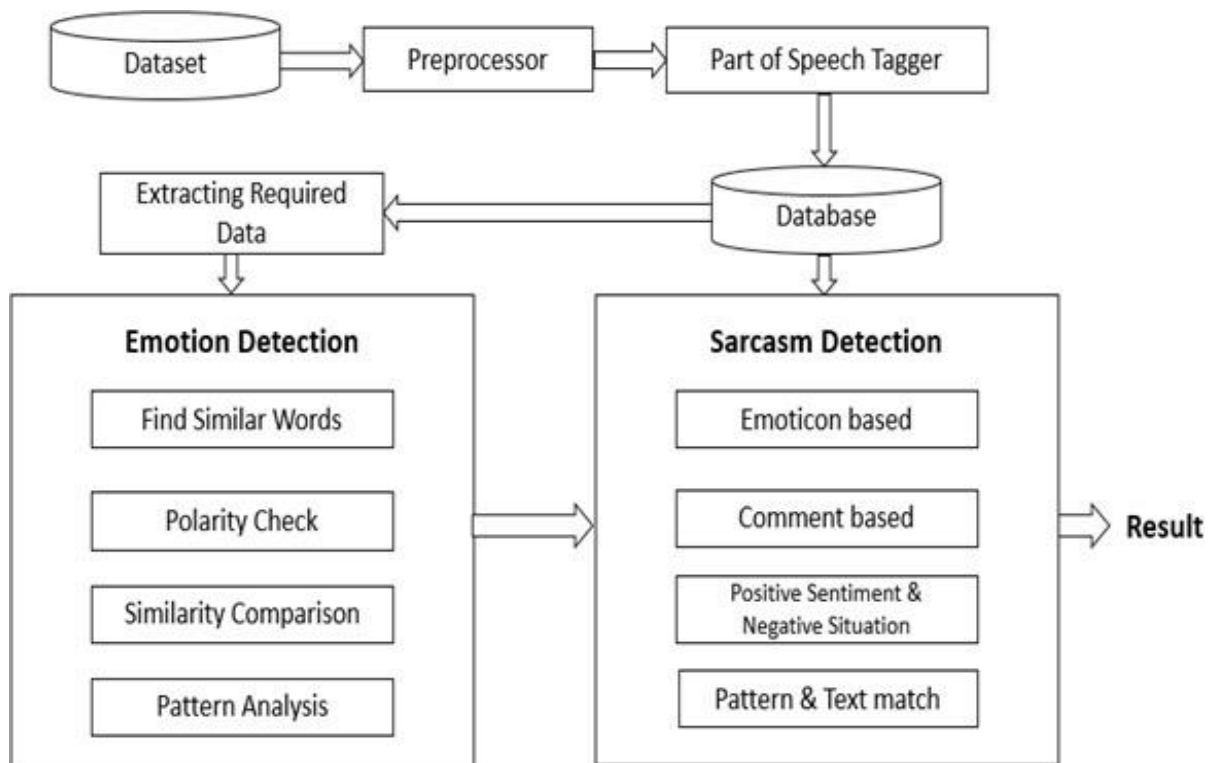
Moreover, social networks have been subject to many studies in recent years, including micro-blogging web sites such as Twitter. The study of feelings programmed and the gift of judgment for mining a boiling subject. Community networks have a broad range of knowledge rather than the behaviors of the consumer and customer who uses these product services, but are totally random classes. While the non-Text material is good to the common language, and it is very hard to identify the details derived from social networks websites through the use of colloquial terms and shortenings. The identification of the hidden sentiment which identifies the original feeling rather than the polarity of the feeling that could have a different polarity of feeling for the same word. In order for the words to be the difficult and most challenge task facing the sentimental analysis of micro blog Web sites to recognize these meanings and polarity.

**B. Related Work**

The sentiment analysis of Twitter is one of the hot topics in recent years for research.

Research papers will be located for description or review of the Twitter sentiment survey. In [4] the author aimed to develop sentiment analysis in a short texts classification. There is not enough detail on a message in the short text. This allows the author to suggest that the functions are extracted using a small set of domains. The proposed approach classifies text in news, events, opinions, deals and private messages in predefined classes. In [5] the author proposed a method for detecting breakthroughs in the community to detect this proposed model in a twitter fact which transforms the change of attitude of people over the period. To calculate the break point, they applied the dynamic counting function. And the tweet classification is based on binary options which must be positive or negatory and can develop and use an emotional corpus for emotional detection in the tweet. The analysis can be carried out on a multidimensional basis. The tweet groups include positive, negative or neutral. In most cases, tweets are keen to organize tweets based on the user split into a specific domain or theme. The unigram, bigrams, adjectives etc. measure a pattern or frequency of the word. [6] sentiment analysis is not well done in non-textual features such as emoticons (e.g. facial expressions, and keyboard symbols). In [7], feelings analysis on the website of micro blogs, like the emoticons and the emoticons are also very important in terms of the feeling analysis. In this paper, the author proposes hypotheses and a machine learning method based on lexicons to find the answers. In [8] the author analyzes the slang of the Internet because every consumer today has their own view of the product and can communicate his opinion on the global web using any website on the blogs. These slang opinions are important to analyze these slang data in three steps. Identify the sentiment-oriented slang in your review and then find the score for any slang that recognizes the sentiment data and then present a slang-orientated lexicon approach on the internet.

### III. SYSTEM ARCHITECTURE



**Fig. System Architecture**

### IV. HYPOTHETICAL SUGGESTED APPROACH

An assumed number of tweets depend on whether or not it is ironic. Using a learning algorithm to classify after a tweet abstract, a set of features is assigned to fitting. The extraction of the feature is done to detect the sarcasm in tweets.

A. Hypothetical Data:

An assumed number of tweets depend on whether or not it is ironic. Using a learning algorithm to classify after a tweet abstract, a set of features is assigned to fitting. The extraction of the feature is done to detect the sarcasm in tweets.

A. Mortgage data:

The Twitter's allow us to collect the tweets. To collect satirical tweet with the #sarcasm hash tag. Although the writer says # tag is not a good way of collecting ironic tweets in the paper[3]. However, works in the additional paper [18]

stressed that this # tag can be used for only a few purposes. However, the hash tag is not robust but can mainly be used for this purpose:

- Use as an anchor for research
- To find an irony marker in a truly sensitive sarcasm wherever it is extremely difficult to achieve

Induce a clear marker to lack them, as "It was fun today. For the first time in weeks! #sarcasm

## V. CONCLUSION

In Twitter, we tend to plan an alternative method for observing irony. The technique planned uses the different tweet mechanisms. The Part-of - Speech tags are used to extract patterns which mark the degree of tweet sarcasm. The system has shown intelligent results because our patterns can not include all satirical patterns of this one.

## VI. REFERENCES

- [1] A. Amolik, N. Jivane, M. Bhandari, and M. Venkatesan, "Twitter Sentiment Analysis of Movie Reviews using Machine Learning," vol. 7, no. 6, pp. 2038–2044, 2016.
- [2] O. Tsur and A. Rappoport, "ICWSM – A Great Catchy Name : Semi-Supervised Recognition of Sarcastic Sentences in Online Product Reviews," no. 9, pp. 162–169.
- [3] C. Liebrecht, "The perfect solution for detecting sarcasm in tweets # not," no. June, pp. 29–37, 2013.
- [4] B. Sriram, "SHORT TEXT CLASSIFICATION IN TWITTER TO IMPROVE INFORMATION FILTERING," 2010.
- [5] C. G. Akcora and M. A. Bayir, "Identifying Breakpoints in Public Opinion."
- [6] B. Pang, L. Lee, H. Rd, and S. Jose, "Thumbs up ? Sentiment Classification using Machine Learning Techniques," no. July, pp. 79–86, 2002.
- [7] M. Boia, B. Faltings, C. Musat, and P. Pu, "A :) Is Worth a Thousand Words : How People Attach Sentiment to Emoticons and Words in Tweets," 2013.
- [8] K. Manuel, K. V. Indukuri, and P. R. Krishna, "Analyzing Internet Slang for Sentiment Mining," pp. 9–11, 2010.
- [9] R. Tomer, "The Neuroanatomical Basis of Understanding Sarcasm and Its Relationship to Social Cognition," vol. 19, no. 3, pp. 288–300, 2005.
- [10] C. Burfoot and T. Baldwin, "Automatic Satire Detection : Are You Having a Laugh ? University of Melbourne University of Melbourne," no. August, pp. 161–164, 2009.
- [11] J. Tepperman, D. Traum, and S. Narayanan, "' YEAH RIGHT ' : SARCASM RECOGNITION FOR SPOKEN DIALOGUE SYSTEMS Signal Analysis and Interpretation Laboratory , University of Southern California Institute for Creative Technologies , University of Southern California," no. 2, pp. 1838–1841, 2006.
- [12] T. Veale and Y. Hao, "Detecting Ironic Intent in Creative Comparisons."
- [13] F. Barbieri, H. Saggion, and F. Ronzano, "Modelling Sarcasm in Twitter , a Novel Approach," pp. 50–58, 2014.
- [14] D. Ghosh, W. Guo, and S. Muresan, "Sarcastic or Not : Word Embeddings to Predict the Literal or Sarcastic Meaning of Words," no. September, pp. 1003–1012, 2015.
- [15] S. K. Bharti, "Parsing-based Sarcasm Sentiment Recognition in Twitter Data."
- [16] D. Maynard and M. A. Greenwood, "Who cares about sarcastic tweets ? Investigating the impact of sarcasm on sentiment analysis."
- [17] H. Pon-barry, No Title, no. September, 2014.
- [18] D. Davidov and O. Tsur, "Semi-Supervised Recognition of Sarcastic Sentences in Twitter and Amazon," no. July, pp. 107–116, 2010.
- [19] E. Riloff, A. Qadir, P. Surve, L. De Silva, N. Gilbert, and R. Huang, "Sarcasm as Contrast between a Positive Sentiment and Negative Situation