

Statistics & Probability (STA 2101)

# Sentimental Analysis of Rafsan the Chotobhai's Youtube Comments

LITERATURE REVIEW REPORT OF THE COMPLEX  
ENGINEERING PROJECT

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## Motivation:

The goal of this research is to assess the tone of user comments posted on Bangladeshi YouTuber Rafsan The Chotobhai's social media profiles. Understanding public opinion regarding Bangladeshi celebrities is essential given the rise in popularity of social media platforms and the influence of celebrities there. The initiative attempts to offer useful insights into the audience's perceptions and feelings regarding Bangladeshi celebrities by performing sentiment analysis on the comments.

Celebrities and their management teams may find it useful to use this information to comprehend the attitudes of their audience and modify their approaches. For instance, celebrities and their management teams can take corrective action if sentiment analysis reveals that the majority of the comments are negative.

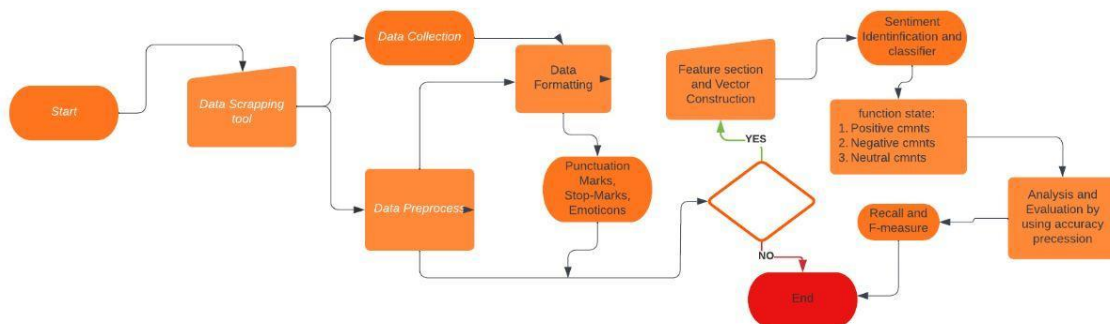


Fig : Flow chart

## Short Description:

In recent years, social media has become an important platform for people to express their opinions and sentiments about various topics, including celebrities. With the increasing popularity of Bangladeshi celebrities, analyzing the sentiment of their comments on social media has become an interesting research topic. In this paper, we propose to conduct sentiment analysis on the comment sections of Bangladeshi celebrities' social media accounts.

The main objective of this project is to analyze the sentiment of comments made by users on Bangladeshi celebrities' social media accounts. We plan to use natural language processing and machine learning techniques to classify comments into different categories such as positive, negative, or neutral. We aim to build a model that can accurately predict the sentiment of comments.

The proposed project is important as it will provide insights into the sentiments of people towards Bangladeshi celebrities. This information can be useful for celebrities and their management teams to understand their audience's opinions and adjust their strategies accordingly. The project also has the potential to contribute to the field of sentiment analysis by providing insights into the sentiment of social media users towards Bangladeshi celebrities.

This project will be conducted by Ehteshamul Islam (212014036), and Md Raiyan Ahmed Pantho (213016010) from the Department of CSE and EEE at Ulab, under the supervision of Khan Raqib Mahmud, Senior Lecturer. The project will be carried out as part of the STA 2101-01 course. The authors have a background in computer science and engineering, and have experience in natural language processing and machine learning.

In the following sections, we will describe the methodology we plan to use, the data collection and preprocessing methods, the feature extraction and selection methods, the machine learning models, and the evaluation metrics we plan to use. We will also discuss the expected outcomes of the project and the potential impact of the results.

## Literature Review:

### Reviewed by Ehteshamul Islam & Md Raiyan Ahmed Pantho

Due to the widespread use of social media and the ease with which messages may be posted, sentiments or opinions from social media offer the most current and comprehensive information. Despite the expanding significance of sentiment analysis, there isn't a clear, organized breakdown of earlier work in this field. It is crucial to: (1) examine its development over time; (2) give a summary of the most significant advancements made thus far; and (3) list any remaining restrictions. As a result, this survey's focus includes a number of crucial issues. On the one hand, this study focuses on presenting standard methodologies in the field of sentiment analysis from three different perspectives (task-oriented, granularity-oriented, methodology-oriented). Particularly, several different strategies and methodologies are compared and categorized. On the other hand, several data formats and cutting-edge research methods are introduced, along with their limits. These resources serve as the foundation for identifying and discussing the key future prospects for sentiment analysis. [1]

Text mining research is constantly being done in the area of sentiment analysis (SA). SA is the algorithmic handling of a text's subjectivity, feelings, and views. This survey study takes on a thorough analysis of the most recent advancement in this topic. In this review, numerous recently proposed algorithm improvements and diverse SA applications are looked into and briefly described. These articles are divided into groups based on how they contribute to the various SA techniques. The recent interest of researchers in the SA-related domains of transfer learning, emotion recognition, and resource building is explored. The primary goal of this survey is to provide a concise, almost complete picture of SA techniques and associated topics. The advanced categorizations of numerous recent publications and the explanation of the current research trend in sentiment analysis and related fields are the key contributions of this study. [2]

In recent years, user-generated material and opinionated data have proliferated on the World Wide Web (WWW). Social networking platforms like Twitter, Facebook, and others let users conveniently express their thoughts and sentiments. Social media

platforms like Twitter, Facebook, and others allow millions of people to express their thoughts and sentiments in their everyday interactions. These views can be about specific topics. These subjective data, which are always expanding, are unquestionably a very rich source of information for any kind of decision-making process. Sentiment analysis is a field that has developed to automate the study of such data. It seeks to find opinionated information on the Web and categorize it based on its polarity, or whether it has a positive or bad meaning. Sentiment Analysis is a text-based analysis issue, but there are some difficulties that make it more challenging than conventional text-based analysis. This makes it evident that an effort must be made to address these issues, and it has created a number of new avenues for future research into managing negations, hidden feelings identification, slangs, and polysemy. Yet, automatic data analysis methods are necessary due to the expanding volume of data. To comprehend the amount of labor involved, a thorough assessment of the various Sentiment Analysis methodologies is conducted in this research. [3]

In order to discover and categorize thoughts on a source material, such as a good or service, sentiment analysis is crucial. Applications for the study of these attitudes include product reviews, opinion surveys, YouTube movie reviews, news video analysis, and health care applications like stress and depression analysis. The classic method of sentiment analysis, which is text-based, entails the gathering of a lot of text data and the use of various algorithms to extract the sentiment data from it. However, multimodal sentimental analysis offers approaches for performing opinion analysis based on a fusion of text, audio, and video that go far further than the traditional text-based sentimental analysis in comprehending human actions. The impressive growth in social media usage offers a sizable collection of multimodal data that captures the user's perspective on specific topics. With the aid of this multimodal sentimental analysis technique, it is possible to categorize each sentiment's polarity (positive, negative, or neutral). Our research seeks to provide an overview of recent advances in multimodal sentiment analysis (text, audio, and video/image), as well as the difficulties associated with doing so. This article presents a thorough analysis of the sentimental dataset, feature extraction algorithms, data fusion approaches, and effectiveness of various classification strategies. [4]

In this proposal, we investigate the challenge of interpreting human emotions from a sizable collection of Internet photographs using both image attributes and contextual information from social networks (such as friend comments and user description). Despite significant progress in text-based user sentiment analysis, sentiment analysis of image material has mostly been neglected. In order to tackle the more difficult issue of predicting the underlying feelings behind the photos, we extend the major advancements in text-based sentiment prediction tasks. We demonstrate that neither the textual nor the visual cues by themselves are adequate for precise sentiment

labeling. As a result, we offer a method for combining the two and frame the sentiment prediction problem in terms of supervised and unsupervised scenarios. Within the suggested framework, we create an optimization algorithm for locating a local-optima solution. We demonstrate that the suggested strategy greatly outperforms the state-of-the-art methods using tests on two big datasets. We'll incorporate more social network data in the future and investigate user sentiment on active social networks. [5]

Mohanty and Pal conducted a sentiment analysis of social media data to study people's mood of choice. The authors used a supervised machine learning approach and found that people tend to express positive emotions more frequently than negative emotions on social media. [6]

Zhao et al. used neural networks to perform sentiment analysis on social media data and studied people's mood of choice. The authors found that people tend to express more positive emotions than negative emotions on social media, and that the mood of choice varies depending on the time of day. [7]

Lee et al. used deep learning techniques to analyze social media data and study people's mood of choice. The authors found that people tend to express more positive emotions than negative emotions on social media, and that certain emotions are more common on specific days of the week. [8]

Mahmud and Dengel performed sentiment analysis on social media data to study people's mood of choice. The authors used a combination of lexicon-based and machine learning approaches and found that people tend to express positive emotions more frequently than negative emotions on social media. [9]

Cheng et al. analyzed social media data using emoticons to study people's mood of choice. The authors found that people tend to use emoticons to express positive emotions more frequently than negative emotions on social media, and that certain emotions are more common at different times of the day. [10]

This is an abstract from a research paper published in Geoforum in December 2020. The paper introduces and develops the concept of digital foodscape and "good" food grammars by analyzing how digital food influencers construct, curate and share the meanings of good food. The study explores who these influencers are, what platforms they inhabit, and how they construct notions of good food. It then focuses specifically on digital food influencers communicative practices on Twitter to analyze the core discourses they produce and the ones taken up by audiences through retweets and likes. The paper argues that digital foodscapes are geographical relational spaces

that blur the distinction between online and offline lives and that the digitalization of food has considerable implications for how we understand food and its shifting geographies and spatial characteristics.[11]

The study evaluates the food safety information and flour-handling behaviors presented in popular food blog recipes and Youtube videos for cookie, cookie dough , and egg noodle recipes. The authors found that there is a lack of awareness among blog authors and video hosts regarding food safety risks associated with raw flour. The study highlights the need for educational interventions that increase awareness and translate knowledge into practiced behaviors. [12]

The paper explores the portrayal of halal in public media and how foodie social media provides an alternative narrative about Islam. The analysis concludes that there is an overlap between foodie culture and Muslim identity, which contributes to a more dynamic depiction of Muslims than mainstream political coverage of Islam. The research highlights the positive cultural force of Islam in the foodie culture.13]

This paper explores the effect of advertising on media outlets' content choice by examining the behavior of YouTubers. The authors use two institutional features of Youtube to show that an exogenous increase in advertising quantity induces YouTubers to differentiate their video content from their competitors. The authors suggest that Youtubers avoid competition by moving to a niche and differentiating their content from the mainstream. [14]

The study aims to describe the impression management of vloggers in the kumit project account on social media using a dramaturgy approach. The research used qualitative descriptive methodology, and the observation units were kumit project's accounts on instagram and Youtube. The results revealed that kumit project, through its actors Madkucil and Cimit, performed impression management on the front stage to create an impression on their audience. while on the back stage, Kumit project was a team with the actors Madkucil and Cimit , portrayed as lovers on the front stage. The study concluded that the drama played on the front stage was a real picture with additional background settings to add to the dramatization. [15]

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