School of Engineering and Applied Science (SEAS), Ahmedabad University

B.Tech (CSE Semester VI) Machine Learning (CSE 523)

Project Abstract Submission #1

Submission Deadline: January 31, 2020 (11:59 PM)

- Group No.:8
- Project Area: Natural Language Processing
- Project Title: Sentiment Analysis on IMDB Dataset
- Name of the group members :
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Abstract

Given the availability of a large volume of online review data (Amazon, IMDB, etc.), sentiment analysis becomes increasingly important. In this project, a sentiment classifier is built which evaluates the polarity of a piece of text of movie reviews obtained from the movie review dataset of IMDB being either positive or negative. There will be a sample of 50,000 movie reviews from users as a dataset. The reviews will be rated as either positive or negative sentiment after implementing our ML algorithm in field of natural language processing .

Like all opinions, sentiment differs from person to person, and can even be out and out irrational. It's critical to examine a large — and relevant sample of data when attempting to measure sentiment. An individual's sentiment toward a brand or product may be influenced by one or more indirect causes: someone might have a bad day and give a negative remark about the movie. With a large enough sample, outliers are diluted in the aggregate. Also, since sentiment very likely changes over time according to a person's mood, world events, and so forth, it's usually important to look at data from the standpoint of time.

We will train system with data and then based on the review of the movie given by the user, trained system will give the review a positive label[1] and a negative label[0] to the review or if this doesn't work, trained system will give an emoji to the movie review. For example, if the review is positive, trained system will give a happy emoji to the review and if the review is negative, we will give an unhappy emoji to the review.

References

- [1] Charu Nanda, Mohit Dua, Sentiment analysis of movie review in hindi language in *International Conference on Communication and signal processing*, 2018,
- [2] TT khet, JC Na, Aspect based sentiment analysis of movie reviews in $\it Journal~of~Information~Science,~2010$