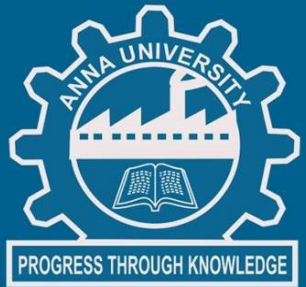# Twitter Emotion Analysis

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Abstract

These days, Social networking sites like twitter, Facebook, etc. are the great source of communication for internet users. So these become an important source for understanding the opinions, views or emotions of people. In this paper, we use data mining techniques for the purpose of classification to perform emotion analysis on the views people have shared on Twitter, which is one of the most used social networking sites nowadays. We collect dataset, i.e. tweets from Twitter and apply text mining techniques – transformation, tokenization, stemming etc. to convert them into a useful form and then use it for building emotion classifier. Here, we are using different classifiers on the data and then compare the results to find which one gives better accuracy and better results.

System Architecture

Objectives

1. To associate emotions with what people think microblogging sites (e.g. Twitter).

2. Better understanding of user needs for e-commerce institutions.

3. Better accuracy than previous models.
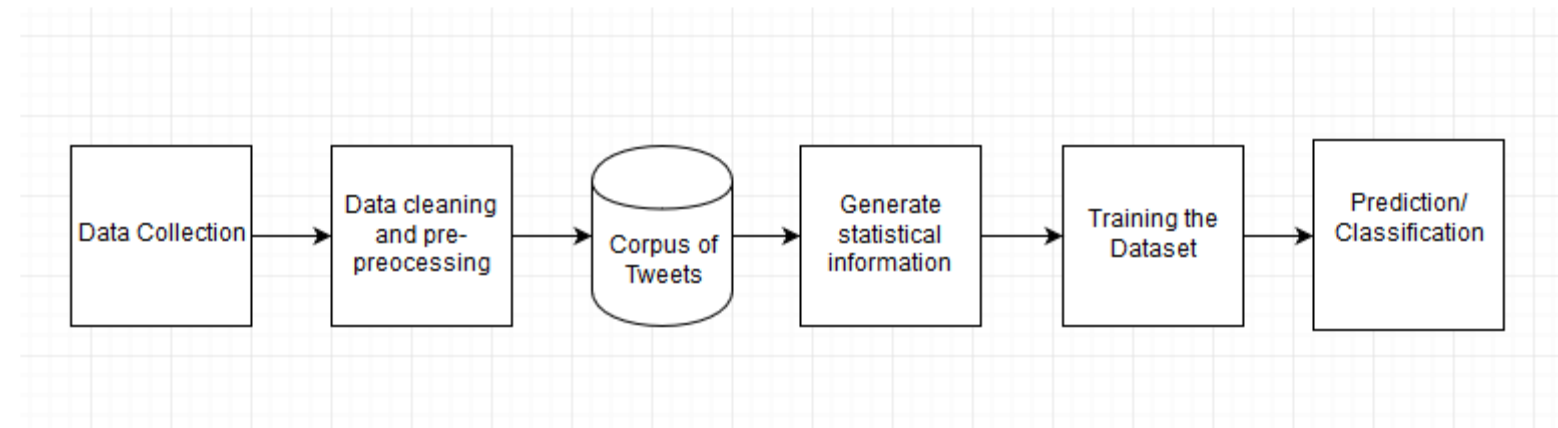
Result Analysis

1. Loss: 0.4603

2. Accuracy: 0.8193

3. Validation Loss: 0.4504

4. Validation Accuracy: 0.8017

Conclusion

The dataset consists of neutral statements as well, which had to be manually removed. The major errors are caused due to the ambiguous nature of the tweets. Neglecting this problem the system has shown higher accuracy than other previous models.

Major References

Bo Pang and Lillian Lee from Yahoo! Research, 701 First Avenue, Sunnyvale, CA 94089, USA, Computer Science Department, Cornell University, Ithaca, NY 14853, USA. "Opinion Mining and Sentiment Analysis."