CS365A - Introduction to Artificial Intelligence

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GROUP - 22

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Title - Automobile Reviews based on Sentiment Analysis of Twitter data

Abstract

Automobile companies now a days are facing a lot of competition in the field of meeting the requirements of the large variety of consumers. There is a need of a mechanism that automatically generates feedback for every new development made in the industry. In the past decade, new forms of communication, such as microblogging and text messaging have emerged and become ubiquitous. While there is no limit to the range of information conveyed by tweets, often these short messages are used to share opinions and sentiments that people have about what is going on in the world around them. Thus, the purpose of this project is to apply this research to help producers understand the wave in the market and the most liked features among a large pool of specifications they launch everyday.

Method

Using Twitter we will collect tweets and form a dataset of three classes: positive sentiments, negative sentiments, and neutral sentiments. Given a message containing a marked instance of a word, we determine whether that instance is positive, negative or neutral in that context. For all such words in a tweet we will calculate the score of the tweet which will help in deciding which category the tweet belongs to. Based on the number of positive and negative tweets we assign score to the automobiles which will help in ranking them. These rankings will lead us to determine which specifications are most liked by the consumers.

Data

Data is collected in the form of tweets related to the specific product model which are further divided into words (dropping the ones that are irrelevant).

References

- 1. Bifet, A. and Frank, E. 2010. Sentiment knowledge discovery in twitter streaming data. Proceedings of 14th International Conference on Discovery Science.
- 2. Predicting Rating with Sentiment Analysis Jason Jong
- 3. Pak, A. and Paroubek, P. 2010. Twitter as a corpus for sentiment analysis and opinion mining. Proceedings of LREC.