Sentimental analysis on slangs used in microblogs

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Abstract

Sentimental analysis is contextual mining of text which identifies and extracts subjective information in source material. However, analysis of social media streams is usually restricted to just basic sentiment analysis and count based metrics. This is akin to just scratching the surface and missing out on those high value insights that are waiting to be discovered.

Also, as microblogs only allow limited amount of words. So, people are keen towards expressing their sentiments or thoughts using short words which is also referred to as slangs to express their whole thoughts using few words itself.

Current algorithms for sentimental analysis work great on formal English literature, but it fails when it comes to slangs. As slangs has no definite list and have no exact meaning, it's all based on contextual and scenario.

So, we are developing new algorithm which not only focuses on keywords which also takes into consideration of every single words and try to overcome slangs by making custom dataset and using stemmers to find its original keyword and meaning.

Hence, it makes our model different in the form and capability that it can also detects and analyze informal English, which are mostly used in microblogs. E.g. For love one can write many variants which are not in English dictionary like "luv", "lub", etc. and same one word can be even used to describe sentences also.

So, to overcome this we are taking more that 1 billion twitter data into account and training our model over these slangs and hence predicting it. Our model is achieving accuracy on range of 60%-70% on different datasets of different microblogs.

Using which, we are analyzing microblogs and calculating it's score by taking consideration of every word and relation of slang meaning with respect to the context.

Which will finally compute the score of a microblog and on the scale of 0-1 up to 8 decimal places we are predicting the score of a microblog and further using scores we can classify the microblog and assign them labels.

This can help a business to understand the social sentiment of their brand, product or service which monitoring online conversations.

Keyword - Snowball Stemmer, Classifiers, NLTK, Neural Network, Twitter, Word2Vector