

1. Reading article *intro to gradable lexicon-based sentiment analysis*
2. Reading demo:
 - 1) Trying emoji on the demo: most utf-8 emoji can be properly analyzed
 - 2) Comparing with another one called Sentiment Polarity Analysis: using the same example provided by vader demo
similar result but vader require less training time. Vader also has better performance in tricky examples in the demo
3. Reading the articles on advantage and limits of different sentiment analysis tools (related to the Sentiment Polarity Analysis)

The accuracy rates are provided by articles.

Dictionary based

Accuracy rate: the accuracy rate is higher (more than 80%), with the increase of manual workload, the accuracy rate increases

Advantages: easy to understand

Disadvantages: heavy workload

Based on K_ NN

Accuracy: very low (60% - 70%)

Advantages: simple thought, simple algorithm

Disadvantages: low accuracy; memory consumption; time consumption

Based on Bayes

Accuracy: fairly good (70% - 80%)

Advantages: simple, efficient, fast operation, good scalability

Disadvantages: accuracy is not high, not practical

Based on maximum entropy

Accuracy: relatively high (above 83%)

Advantages: high accuracy

Disadvantages: long training time

Based on SVM

Accuracy: the highest (more than 85%)

Advantages: high accuracy

Disadvantages: training takes time