Technology Review on Aspect-based Sentiment Analysis in Tourism Industry

Sentiment analysis has become an important tool in understanding user-generated content in general and textual reviews in particular. Tourism is one of the most progressive industry that values people's experience and how to interpret the emotional and experiential elements of tourist activities has gained increasing attention in both industry and academia. This review will cover different approaches, toolkits and applications of sentiment analysis in the context of tourism industry and the newly developed aspect-based approach.

Key methods: Since there're plenty of papers reviewed the sentiment analysis theories and approaches, we will briefly touch this part.

Supervised machine learning approaches:

- Support Vector Machine (SVM)
- Naïve Bayes
- Logistic regression
- Decision trees

Unsupervised machine learning approach:

- Cluster analysis

Dictionary-based approach:

- VADER

Open source toolkits: We will place our emphasis on open source toolkits which will shed some light on our final project too.

1. Natural Language Toolkit (NLTK)
2. Stanford CoreNLP
3. TextBlob
4. General Architecture for Text Engineering (GATE)
5. SentiWordNet
6. …

Online applications: As an interesting expansion of our tech review, we would like to see how sentiment analysis applied to some newly developed applications.

MeaningCloud: https://www.meaningcloud.com

NCSU Tweet Visualizer: https://www.csc2.ncsu.edu/faculty/healey/tweet_viz/tweet_app/

Social Mention: http://www.socialmention.com

Sentiment Analyzer: https://www.danielsoper.com/sentimentanalysis/default.aspx

SentiStrength: http://sentistrength.wlv.ac.uk/

Sentigem: https://sentigem.com/#!

Social Searcher: https://www.social-searcher.com/social-buzz/

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