Rule-based sentiment analysis for financial news

Abstract

This paper describes a rule-based sentiment analysis algorithm for polarity classification of financial news articles. The system utilizes a prior polarity lexicon to classify the financial news articles into positive or negative. Sentiment composition rules are used to determine the polarity of each sentence in the news article, while the Positivity/Negativity ratio (P/N ratio) is used to calculate the sentiment values of the overall content of each news article. The performance of the Sentiment Analyser was evaluated using a dataset of manually annotated financial news articles collected from various online financial newspapers. The result was encouraging as our Sentiment Analyser obtained an overall F-Score of 75.6% for both positive and negative classifications.