Lexicon-Based Sentiment Analysis for Stock Movement Prediction

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Abstract : Sentiment analysis is a broad and expanding field that aims to extract and classify opinions from textual data. Lexicon-based approaches are based on the use of a sentiment lexicon, i.e., a list of words each mapped to a sentiment score, to rate the sentiment of a text chunk. Our work focuses on predicting stock price change using a sentiment lexicon built from financial conference call logs. We introduce a method to generate a sentiment lexicon based upon an existing probabilistic approach. By using a domain-specific lexicon, we outperform traditional techniques and demonstrate that domain-specific sentiment lexicons provide higher accuracy than generic sentiment lexicons when predicting stock price change.

Keywords : computational finance, sentiment analysis, sentiment lexicon, stock movement prediction

Conference Title : ICCFMA 2020 : International Conference on Computational Finance, Methods and Applications

Conference Location : New York, United States

Conference Dates : June 04-05, 2020