

Abstract

The purpose of this thesis is to explore various possibilities of performing online sentiment analysis and utilizing obtained information in stock market prediction. Firstly, several tools and sources available for sentiment analysis are presented and brief history of research related to each tool is provided. Additionally, Google Trend model is designed to evaluate whether information about searching volume of selected terms can be used to predict future movements of S&P 500 index. Strategy based on such model is implemented on historical data and its cumulative return is compared to classical buy and hold strategy. Furthermore, hypothesis whether it is possible to utilize publicly released news as a leading indicator for future stock returns is tested. Lastly, process of algorithmic sentiment analysis is described and its strengths and weaknesses are assessed.