

Stock Broker P – sentiment extraction for the stock market

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Abstract

We have developed a Web news Mining based decisive system for stock movement, named as “Stock Broker P”, i.e. “stock broker prediction”. We attempt to gather the stock news from major websites and then create a sentiment index based on which we will suggest the direction of the stock market as a whole and of a particular stock. The classification of the headline is done with the help of Naïve’s Classifier with modifications.

We obtained results with an accuracy of over 60%.

Keywords: data extraction, abstraction, data mining, naïve classifier, Bayesian classifier, natural language processing, fuzzy logic, generic, confidence, sentiment index.

1 Introduction

With the advent of the web, there has been a sharp increase in the influence of individuals on stock market via web based trading and the posting of sentiment to stock message boards. Also Internet has made it possible to spread the news fast which plays an important role in defining the stock movement direction. The main components of the systems are:

- A technology for extracting small investor sentiment and news from the web sources using manipulation of WebPages, Opinion mining and Sentiment extraction from the web.
- Create a sentiment index based on available data by aggregating the sentiment value of each newsline.
- Predicting the direction of stock market as a whole and of a particular stock by classification based on sentiment index.

