

1/Sigma Term Weighting Scheme for Sentiment Analysis

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Abstract : Large amounts of data on the web can provide valuable information. For example, product reviews help business owners measure customer satisfaction. Sentiment analysis classifies texts into two polarities: positive and negative. This paper examines movie reviews and tweets using a new term weighting scheme, called one-over-sigma ($1/\sigma$), on benchmark datasets for sentiment classification. The proposed method aims to improve the performance of sentiment classification. The results show that $1/\sigma$ is more accurate than the popular term weighting schemes. In order to verify if the entropy reflects the discriminating power of terms, we report a comparison of entropy values for different term weighting schemes.

Keywords : $1/\sigma$, natural language processing, sentiment analysis, term weighting scheme, text classification

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