

One-Class Support Vector Machine for Sentiment Analysis of Movie Review Documents

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Abstract : Sentiment analysis means to classify a given review document into positive or negative polar document. Sentiment analysis research has been increased tremendously in recent times due to its large number of applications in the industry and academia. Sentiment analysis models can be used to determine the opinion of the user towards any entity or product. E-commerce companies can use sentiment analysis model to improve their products on the basis of users' opinion. In this paper, we propose a new One-class Support Vector Machine (One-class SVM) based sentiment analysis model for movie review documents. In the proposed approach, we initially extract features from one class of documents, and further test the given documents with the one-class SVM model if a given new test document lies in the model or it is an outlier. Experimental results show the effectiveness of the proposed sentiment analysis model.

Keywords : feature selection methods, machine learning, NB, one-class SVM, sentiment analysis, support vector machine

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