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Abstract

Opinion mining refers to the use of natural language processing, text analysis and computational linguistics to identify and extract the subjective information. Opinion Mining has become an indispensable part of online reviews which is in the present scenario. In the field of information retrieval, a various kinds of probabilistic topic modeling techniques have been used to analyze contents present in a document. A topic model is a generative technique for document. All

topic models share the idea that documents are having mixture of topics, and the topic is a probability distribution over words. Recently topic modeling techniques have been used to identify the meaningful review aspects, but existing topic models like Latent Dirichlet Markov Allocation (LDMA), hierarchical aspect sentiment model (HASM) do not identify aspect specific opinion words and also not suitable for shared features. In the proposed system, movie review dataset is collected from the IMDB database and is preprocessed. TF-IDF is calculated for the preprocessed data and result is given to LDA model which is then used to discover both the aspects and aspect specific opinion words. After that CHI value has been determined, SVM classifier is used to classify the topics preferable to each and every document.

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Index Terms

Computer Science

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Keywords

Latent Dirichlet Allocation Support Vector Machine Tf-idf Chi Value.