

RESEARCH PROPOSAL

Sentiment Analysis (SA) task is to label people's opinions as different categories such as positive and negative from a given piece of text. Another task is to decide whether a given text is subjective, expressing the writer's opinions, or objective, expressing. These tasks were performed at different levels of analysis ranging from the document level, to the sentence and phrase level. Another task is aspect extraction which originated from aspect-based sentiment analysis in phrase level. All these tasks are under the umbrella of SA. In recent years a large number of methods, techniques and enhancements have been proposed for the problem of SA in different tasks at different levels.. And also to review the main research problems in recent articles presented in this field. We found that machine learning-based techniques including supervised learning, unsupervised learning and semi-supervised learning techniques. In the proposed work a sentiment-based rating prediction method has been introduced to improve prediction accuracy in recommender systems. Initially the proposed social user sentimental measurement approach and calculate each user's sentiment on items/products. In the second process, the system not only considers a user's own sentimental attributes but also take interpersonal sentimental influence into consideration. And the system considers product reputation, which can be inferred by the sentimental distributions of a user set that reflect customer's comprehensive evaluation. Finally we fuse three factors user sentiment similarity, interpersonal sentimental influence, and item's reputation similarity into our recommender system to make an accurate rating prediction. Finally the system conduct a performance evaluation of the three sentimental factors on a real-world dataset collected from own dataset. Our experimental results show the sentiment can well characterize user preferences, which helps to improve the recommendation performance