عنوان مقاله:

Alleviation of Cold Start in Movie Recommendation Systems using Sentiment Analysis of Multi-Modal Social Networks

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خلاصه مقاله:

The movie recommendation systems are always faced with the new movie cold start problem. Nowadays, social media platform such as Twitter is considered as a rich source of information in various domains, like movies, motivated us to exploit Twitter's content to tackle the movie cold start problem. In this study, we propose a hybrid movie recommendation method utilizing microblogs, movie features, and sentiment lexicon to reduce the effect of data sparsity. For this purpose, first, the movie features are extracted from the Internet Movie Database (IMDB), and the average IMDB score is calculated during the ۷-days opening of the movie. Second, the related tweets of the movie and the cast are retrieved by the Twitter API. Third, the polarity of tweets and the public's feeling towards the target movie is extracted using sentiment lexicon analysis. Finally, the results of the three previous steps are integrated, and the prediction is obtained. Our results are compared with the sales volume of the target movie in ۷-days opening, which is available in the Mojo Box office. In addition to the real-world benchmarking, we performed extensive experiments to demonstrate the accuracy and effectiveness of our proposed approach in comparison with the other state-of-the-art methods.

کلمات کلیدی:

Movie Recommendation Systems, Cold Start, Sentiment Analysis, Twitter, IMDB, Mojo Box office