

# Abstract

Recommender System is a tool helping users find content and overcome information overload. It predicts interests of users and makes recommendation according to the interest model of users.

The original content-based recommender system is the continuation and development of collaborative filtering, which doesn't need the user's evaluation for items. Instead, the similarity is calculated based on the information of items that are chose by users, and then make the recommendation accordingly. With the improvement of machine learning, current content-based recommender system can build profile for users and products respectively. Building or updating the profile according to the analysis of items that are bought or visited by users. The system can compare the user and the profile of items and then recommend the most similar products. So this recommender method that compare user and product directly cannot be brought into collaborative filtering model. The foundation of content-based algorithm is acquisition and quantitative analysis of the content. As the research of acquisition and filtering of text information are mature, many current content-based recommender systems make recommendation according to the analysis of text information.

This project introduces content-based recommender system for the movie website . There are a lot of features extracted from the movie, they are diversity and unique, which is also the difference from other recommender systems. We use these features to construct movie model and calculate similarity. We introduce a new approach for setting weight of features, which improves the representative of movies. Finally we evaluate the approach to illustrate the improvement.

**Key words: recommender system, content-based, collaborative filtering, similarity, movie**