

Abstract

Collaborative filtering is one of the commonly approach in recommender system to obtain the predicted value of item by active user. In collaborative filtering there are several problem that often arise, one of them is data sparsity. Data sparsity; is the problem of limited user to rate overall item. To overcome these problem, there are several models including memory-based, model-based and hybrid model. Each model has the advantages and disadvantages. Therefore in this final project used the combined models those are combine clustering and smoothing to handling the problem of data sparsity in the prediction of user ratings. The result show Mean Absolute Error (MAE) is about 0,732.

Keyword : *collaborative filtering, sparsity, clustering, smoothing*