Abstract

Recommender system is an application which recommends items that users may prefer and match to their profile and widely used as an alternative of search engine

This journal implements and analyze item-based collaborative filtering recommender system, which implement semantic similarity. Semantic similarity information can be obtained from WordNet that will be used as a dictionary. This final project analyze & measure how accurate the prediction after augmented with semantic similarity. Parameters such as ratio between training and test set, neighborhood size, model size, and value of variable α will be measured.

Prediction accuration resulted from semantic enhanced item similarity algorithm is lower (higher error value) compared to item-item similarity. This is caused by words that are excluded from WordNet. Moreover, the processing time in producing prediction using semantic similarity is time-consuming. Further development may employ multithreading to shorten computation time.

Keywords: *recommender system, collaborative filtering, semantic similarity, recommendation*