

Abstract

Recommender system is an application/program that trying to predict or give a recommendation from an item to a user, based on information that retrieved from the user. The common approach that often used in developping recommender system is collaborative filtering and content-based recommendation. Every approach have its own weakness.

Therefore, hybrid recommendation system exist, and it combine collaborative filtering and content-based recommendation, can be expected to minimalize the drawbacks in every approach. There is two method to do hybrid recommendation system, that is linear combination and sequential combination. In sequential combination method, the combine is doing one after another. First, content-based recommendation, and then continued with collaborative filtering.

In this final project, I will implement hybrid recommender system that using efficient sequencing that combine content-based recommendation and collaborative filtering with using Fuzzy C-Means clustering algorithm and K-Means clustering algorithm for Movielens Dataset. With combine the two approach based on clustering algorithm, so we can called the combine for the two algorithm as hybrid clustering.

With using efficient sequencing method that applied Fuzzy C-Means clustering and K-Means clustering algorithm in hybrid recommender system, hope that the result from the recommendation system is more accurate than if using one approach. Next, the prediction will be evaluated using Mean Absolute Error (MAE).

Key Word : *Hybrid Recommender System, Collaborative Fitering, Content-based Recommendation, Efficient Sequencing*