

Abstract

In this day and age, there is a lot of entertainment that can be done, one of which is watching movies using the Netflix platform. When you want to watch, sometimes users can be confused about which movies to watch according to their tastes and interests, which requires a solution, namely by using a recommendation system. The recommendation system is a system that emerged as a solution to provide information by learning data from users with previously stored data items. One of the recommendation system techniques is Collaborative Filtering. By using Collaborative Filtering, this study will focus on using two Matrix Factorization-based methods, which are Non-Negative Matrix Factorization and Probabilistic Matrix Factorization, to try to solve the gap in the data. This study will use the Random Forest algorithm to improve the results of good predictions. A recommendation system based on Matrix Factorization on Twitter will be made using Random Forest in a case study of films on Netflix. The experimental results have shown that the use of the system gets a Mean Absolute Error (MAE) value of 0.7641 to 0.8496 and a Root mean squared error (RMSE) of 1.0359 to 1.1935.

Keywords: Matrix Factorization, Random Forest, Recommender System, Twitter, MAE, RMSE.