

Abstract

In modern times, the movie industry is growing rapidly. Netflix is one of the platforms that can be used to watch movies and provides many types of genres and movie titles. With so many genres and movie titles sometimes making it difficult for people to choose a movie to watch, one solution to the problem is a recommendation system that can recommend movies based on user ratings. One method in the recommendation system is collaborative filtering. One of the algorithms contained in collaborative filtering is singular value decomposition. Twitter is one of the places where people often write their opinions about the movies they have watched, from people's tweets on Twitter will be processed into rating value data. In this system, tweets become input that is processed into data that has a rating. This research implements a user-based recommendation system based on ratings from tweets using collaborative filtering combined with the Singular Value Decomposition (SVD) algorithm and Support Vector Machine (SVM) classification and implemented it on user-based and item-based. This research aims to implement a system that combines collaborative filtering techniques with the Singular Value Decomposition (SVD) algorithm and Support Vector Machine (SVM) classification. With the hope of producing a good movie recommendation model and providing accurate predictions for recommended and non-recommended movies. The test results in this study show that Collaborative Filtering gets the best RMSE value of 0.8162 on user-based and 0.5911 on item-based. The combination of Singular Value Decomposition (SVD) algorithm and Support Vector Machine (SVM) classification using hyperparameter tuning resulted in 81% precision and 81% recall for user-based while 80% precision and 80% recall for item-based.