ABSTRACT

The development of the industry in the film sector has experienced rapid growth, marked by the emergence of film streaming platforms such as Netflix and Disney+. With the abundance of available films, users face difficulty in choosing films that suit their preferences. Recommender systems can be a solution to this problem for users. Recommender systems rely on user reviews, making Twitter a platform that can be used to collect user reviews of a film. This study will develop a recommender system that has the potential to provide item recommendations to users using the weighted hybrid filtering and GRU methods. The weighted hybrid filtering used is a combination of collaborative filtering and content-based filtering methods. The dataset used in this study was obtained by crawling tweets relevant to the feedback of specific accounts regarding a film. The dataset resulting from the data crawling consists of a total of 854 films, 45 users and 34,086 tweets consisting of film reviews from Twitter users. The GRU model classification is performed on the results of weighted hybrid filtering with model optimization involving testing various test size scenarios and optimizer methods. The test sizes used are 40%, 30%, and 20%. The optimizer methods used include Adam, Nadam, Adamax, Adadelta, Adagrad, and SGD. The research results show that the optimal outcome is obtained using the Nadam optimization method. The performance evaluation yielded 85,74% precision, 88,63% recall, 88,63% accuracy, and 86,30% F1-score.

Keywords: Recommender System, Hybrid Filtering, GRU, Twitter, Netflix, Disney+