# ABSTRACT

This research aims to present and discuss the similarity among users in a social network based on CF (Collaborative Filtering) algorithm and SimRank (Similarity Based on Random Walk) algorithm. The CF algorithm, the rating on each item (movie and book) by users and from each user's profile, was used to predict the relationship between users. The SimRank algorithm calculates the similarity among users through finding the nearest neighbors for each user in the social network. The combination of these two algorithms would be used to get how "people may interest each other" from users' database. In the experimental analysis, a data set "DouBan" (the data set is collected from a Chinese website) would be used and demonstrates the performance of the improvement technique with a website. The website would also be developed to show the recommended processing of the proposed algorithm. Finally, the recommendation accuracy of the proposed method is ensured through comparing the proposed method with the ordinary algorithms, which are common in social networks.