

Universiti Teknologi MARA

**Friend Recommendation Using
Collaborative Filtering**

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ABSTRACT

In nowadays era, recommender engine are widely used in human daily lifestyles to gain or get some information. It has been a high demand and the most efficient ways to get any information. It is also been proven as the most convenient things as it is easy to use and do not require any difficult or complicated techniques to access it. Friend can be divided into two categories which are online friend and real life friend. With friend, everyone can feel their life is more colourful and merrier. There are many ways to gain new friend in university such as get involved in club activities, play sports and others. As an online survey had been done to identify the interactions problems that occurs among the students in UiTM Terengganu campus Kuala Terengganu which are the difficulties to get a new friend, the shyness and the choice of friends are limited to their classmate only. Friend recommendation that implement Collaborative Filtering algorithm can be used to get a new friends easily by calculating the most similar user based on the rated hobbies. The data was being collected by using Google Form to know the rating of the students to the listed hobbies. Lastly, the evaluation of the accuracy of the recommendation is done by using Mean Absolute Error and on average the predictive value of Collaborative Filtering algorithm distance from the actual value is 0.046. So, the recommendation has the lower mean error and accurate. Some additional future works should be applied to improve the algorithm performance are to add more data and test with more attributes like favorite food, colour and others.

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