

# Recommendation System Implementation for Partners Exercise in Fitness Center on Fit Partners Design Application Using Hybrid Content-Collaborative Reciprocal Algorithm

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## ABSTRAK

People often quited exercising due to the lack of exercise partner or the absence of people with similar workout preference. Hybrid content-collaborative reciprocal algorithm searches for users based on the user profile by finding the value of the level of support. First, algorithm will look similar to the current user, called SU (similar users). After that, it will search who have interacted with SU, called CU(*candidate users*), called EOI. This value is based on indicators the conversation intensity via chat, giving positive emoticons during a conversation via chat, seeing prospective partners profile, sharing the information or tips, comparison of the number of conversations and responses given via chat, similarity of age, gender, workout type, body type, distance, and workout time, giving rating, friends of prospective fitness partners, and sending request as a partners. After testing the accuracy of the algorithm, the success rate is shown to be 50%. This low percentage is due to some of the recommended workout time is not according to the current user time workout, besides that into consideration current users refuse is no clear profile of the user who recommended such as a profile picture and completeness of the data themselves.

Hybrid algorithm-content collaborative Reciprocal not use weighting, that one user could have been more like the fellow exercising an age closer to him, but differed with others, it could be because of the similarity of the body. Because of these differences in preferences hybrid algorithm-content collaborative Reciprocal not accommodate the weight of each indicator.

**Keywords :** hybrid content-collaborative reciprocal; dissimilarity measurement; EOI; uncertainty reduction theory;