Optimum Personalized Confirmed Quality Aware Recommendations

Seema P. Nehete, Dr. Satish R. Devane

*Datta Meghe College of Engg.,**Airoli, Navi Mumbai, India*

*nehete.seema@gmail.com, srdevane@yahoo.com*

***Abstract***

Recommendation System(RS) save the time of users in their hectic life schedules for purchasing their interested products.RS faces challenges of data sparsity, cold start, efficiency of prediction of products and hence the proposed system is making use of Multi-kernel Fuzzy C Means (MKFCM) clustering to group together similar users having similar age, occupation, and gender into clusters. Clusters of similar users are optimized using the Fruit Fly (FF) optimization algorithm which gives high cluster accuracy and dynamically created subclusters of similar users and their favorite products, overcome sparsity issue which make the analysis easy. Collaborative Filtering(CF), one of the filtering method of RS is used to predict products for target users.This RS gains user’s faith by additionally performing analysis of textual reviews using optimized Artificial Neuron Network(ANN) to recommend the highest quality products, thus dual tested and quality confirmed products are recommended to the user. Experimentation is done on a standard movilense dataset used by many researchers to prove the efficiency of this RS and reviews of all users are extracted from online search engines for product quality analysis before recommendation. Experimentation proves highest recall and accuracy than existing recommendation systems.



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1. **References**

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