

ABSTRACT

Cold-start issues and data sparsity are frequent issues with conventional recommendation systems. The Cross-Domain Recommendation (CDR) approach was developed to address these issues. CDR enhances cold-start prediction performance in the target domain by utilizing data from the source domain. EMCDR is a commonly used CDR method and has been proven effective in modeling CDR. EMCDR uses an embedding process with Matrix Factorization and non-linear mapping with neural networks such as MLP. In this study, we used the Amazon Review dataset, specifically, the source domain is Amazon Fashion, while the target domain is All Beauty. This study aims to evaluate the hyperparameter configuration in the EMCDR method. The results of our research found that the best hyperparameter configuration for the EMCDR method with non-linear mapping is K value of 20, 1 hidden layer, beta of 0.01, and learning rate of 0.0001. The configuration produces accuracy with metric evaluation MAE of 0.7851 and RMSE of 0.8398. Through this study, it can be concluded that the selection of the right hyperparameters greatly affects the accuracy performance of the EMCDR method.