Abstract
Twitter is one of the most popular microblogging platform nowadays that allows users to send messages in the form of text, images, or videos, and to share information quickly. One of the main features on Twitter is retweet, with this feature users can repost messages uploaded by others. This research is aimed at creating a retweet prediction model using ANN classification method optimized with CSO algorithm using user, content, and time-based features. The problem encountered in this research is the class imbalance that often occurs in retweet data. To overcome this problem, oversampling and undersampling techniques are used. The evaluation results in this study show that the ANN classification process with CSO can achieve an accuracy value of 86.70% and F1-Score of 86.61% by performing undersampling techniques.

Keywords: retweet, prediction, ANN, CSO, undersampling