Abstract

Twitter is one of the social media platforms that has a large user base across various demographics. Users can use Twitter to search for information about celebrities, political issues, products, and trending topics of discussion. The information shared on Twitter can be referred to as tweets. Tweets can be further shared by other users using the retweet feature, which allows the tweet to reach a wider audience. This research aims to build a retweet prediction system and examine how tweets will spread. The method used in this research is Artificial Neural Network classification optimized with Firefly Algorithm, based on user-based and content-based features. This modeling approach demonstrated the best results after applying imbalanced class handling using oversampling with the SMOTE technique. The F1-Score obtained in this research is 88.07%.

Keyword: Twitter, tweet, retweet, ANN, FA, user-based, content-based.