## **Abstract**

Online social media plays an important role for everyday human needs, which can build connectivity between users and other users. In this modern era almost every society has social media as a means of information and as an expression with each user's personal perspective on various aspects of life. By using social media on Twitter, the author can find a variety of characters and personality possessed by each social media user. One problem is how to clarify one's personality through tweets on Twitter social media. So in this case, the writer classifies the personality of Twitter users by using the DISC assessment and builds a personality classification system to determine the accuracy of the Decision Tree C4.5 algorithm algorithm and good performance value. What distinguishes this study from other studies is that each word uses the TF-IDF and TF-RF weighting methods. Followers, following, retweet, hashtag, uppercase, lowercase, emoticons and others are a means of approach based on the user's social behavior. Experiments through the approach of social behavior obtained the value of Bi Class Dominance is 97.56, Influence is 70.13, Steadiness is 57.14, Compliance is 73.34. Experiments through the TF-IDF linguistic approach showed that the Bi Class Dominance value was 97.50, Influence was 73.17, Steadiness was 46.15, Compliance was 74.36. Experiments through the TF-RF linguistic approach showed that the Bi Class Dominance value was 100, Influence was 75.00, Steadiness was 53.28, Compliance was 72.50. The F-Measure calculation results from the social behavior approach is 0.2626 from the training data and 80: 20 test data, through the linguistic approach on TF-IDF, the F-Measure calculation results are obtained from 0.3010 from the training data and 90: 10 test data, and experiments through linguistic approach to TF-RF obtained F-Measure results of 0.4824 from training data and 90: 10 test data.

Keywords: DISC, Decision Tree C.45, TF-IDF, TF-RF, Twitter