

Abstract

Analysis of a person's personality is needed as one of the assessment tools in several cases, including job recruitment, health, and career. Hiring a psychologist is one way to assess a person's personality. But using this method requires a lot of money and time. Assessing one's personality through social media is another alternative that can be used to save money and the time needed. Twitter also has millions of users who have different ownership, so users can send news or other information differently. This study aims to build a system to classify twitter user personality using the Iterative Dichotomiser 3 (ID3) classification method and TF-IDF and TF CHI-Square weighting methods. There is still little research on the use of the DISC personality model as a tool in assessing personality, the use of two weighting methods and the addition of features based on social behavior such as followers, following, retweeting and others can be a differentiator from previous research. From the results of the experiment it was found that the best average accuracy for social behavior approach is 74.94% in the comparison of training data and test data at 90:10, for the linguistic approach using TF-IDF is 71.11% with the selection of 10 best words in the comparison of training data and test data at 90:10, and for the linguistic approach using TF Chi-Square is 73.07% with the selection of 17 best words in the comparison of training data and test data at 80:20.

Keywords : DISC, ID3, TF Chi-Square, TF-IDF, Twitter