

## **Abstract**

Social media's ever-increasing use makes data about human behavior readily available. Twitter is one of these social media platforms. The tweets and profile information of users can be used to predict their personalities. The Big Five personality traits are Openness to Experience, Conscientiousness, Extraversion, Agreeableness, and Neuroticism. Big Five personality predictions on Twitter are significant because traditional personality detectors are expensive and time-consuming, and the results of personality predictions can be used to assist recruiters in placing the best employees based on the Big Five personality traits. Numerous previous studies have been conducted on Big Five personality prediction using a machine learning approach and a variety of methods, but predictions using Indonesian data are still scarce and have low accuracy. As a result, this study employs the Random Forest method to develop a Big Five personality prediction system. Random Forest performs well with less accurate data and has a large number of adjustable parameters. The system makes use of tweet data to provide a sentiment and emotion feature. Additionally, account information is utilized as a social feature. The system achieves the highest accuracy of 69.23% when all features are combined.

Keywords: big five, random forest, twitter