

ABSTRACT

Psychology is a science that examines the behavior and mentality of individuals, usually in evaluating these behaviors and mentalities, psychologists will use psychological tests, here we will focus more on the DAT interest and aptitude test, this interest and aptitude test is needed to measure talents and interests from someone, because at this time many teenagers in the age range of 15-18 years (SMA) are still confused or do not know what their interests and talents are. and with the Covid-19 Pandemic, psychological tests are very rarely carried out. To overcome this problem, the author implements the Random Forest method on a website-based psychological test, this test is web-based so that students can take psychological tests flexibly and at any time by using the random forest method, the system will predict students' interests and talents based on datasets that have been collected. , the value of the datasets will be a parameter variable contained in each tree / tree contained in the random forest. The results of voting for the most dominant tree/tree will be a recommendation for the interests and talents of students.

The author uses datasets belonging to high school students that have been cleaned and ready to be trained and used as models using the Random Forest method, then the model's score is 82% but one element has a low f1 score, so Dummy data is added. After adding the data, the Dummy score increased to 94% with a better f1 score.

Keywords: DAT, Random Forest, Psychological Test