

ABSTRACT

Any form or face is one of the characteristics of the most prominent men, the best known and most memorable. Knowingly or not, we often judge people on the face and often draw conclusions that person or not seen either of her face. Many people who want to learn a person's character through observation of the so-called science of physiognomy face, which include bifurcation in the science of Psychology.

In this final detection applications built character of a person based on face shape and eye Eigenface method. In the preprocessing stage, performed image processing such as scaling and grayscaling, after it is done making characteristics by using Eigenface method and the classification process by using a K-Nearest Neighbor algorithm (KNN).

In the KNN unit will be two types of processing, namely training and testing. Training is done to obtain a person's character feature vector classification based on face shape and eyes. To determine the character of a person by using the K-Nearest Neighbor category that has the smallest distance is obtained by determining the parameter K (number of nearest neighbors) = 1 and calculate the Euclidean distance squared. Based on the results of the study, obtained the degree of accuracy of K-Nearest Neighbor for 300 test data was 80%.

Keywords: science of physiognomy, the science of Psychology, Eigenface, K-Nearest Neighbor