

ABSTRACT

Rapidly evolving technologies impact on public awareness on cultural heritage. Many people who have forgotten the existing culture, one of which is the script of the archipelago. At the end of the previous task discusses literacy Sundanese identifier using Learning Vector Quantization (LVQ) on android with an accuracy rate of 60.90%. At the other end of the task javanese script using the Self-Organizing Map (SOM) in matlab with 96.25% accuracy rate with 7.9 seconds of computing time.

From the thesis above, then on this last task designed an application identifier javanese script based on Android. In this final input javanese script taken using a camera android, and then processed in MATLAB software. The parameters used include, among others, the type of edge detection Canny, Sobel, Prewitt, and Robert, as well as the type of extraction characteristics include Sum, DCT, DWT, and DFT. While the classification method used is backpropagation. The output of this application in the form of written Indonesian. To assess the accuracy of these applications be tested on parameters used in the back propagation neural network.

From the testing that has been done can be concluded that the best accuracy was 80% with the amount of training data 40 parameters of data, Sobel edge detection, feature extraction DCT, number of hidden layers 120 layers, learning rate 0.01, function activation used is purelin, and training algorithm using trainrp.

Keyword: Javanese script, image processing, android, MATLAB, feature extraction, and Backpropagation.