

ABSTRACT

Understanding Korean language needs big effort. We have to know about the letter first and then we can get the meaning of the Korean word. To make it easy, nowadays there are some digital dictionary applications, but the input of these applications are still in latin text format.

In this final project, the Korea-Indonesia translator application has been designed, which will identify Korean character then translate it to latin version, and to Indonesian language. The sequence of Korean characters which is identified in this final project come from printed Korean word document. Then the image of this document is captured by the scanner, directly processed to be translated into latin version, and get the meaning in Indonesian.

Generally, the process has 6 steps. They are preprocessing, segmentation step, feature extraction step, character recognizing use Backpropagation artificial neural network which has function as a decision maker to recognize the Korean character, and checking Korean word to Indonesian.

Accuracy in testing process is coming by taking samples of trained image and untrained image. The final accuracy result is affected by several parameters, they are number neuron in hidden layers, number of maximum epoch, and number of hidden layers. The best averaged accuracy result is 79,69%.

Keywords : *pattern of Korean letter, BackPropagation artificial neural network*