

ABSTRACT

Chinese nation is one of the nation's largest and noteworthy. Not only from its population of almost 20% of the world's population, but also from the aspect of science, business and the booming economy and China is now also increasingly opening up to the international world. This is why language is often called the Chinese or Mandarin to be one of the international language that needs to be mastered. Chinese is a tonal language are diverse and very unique, which makes the mastery of this difficult language to learn and in terms of writing and reading.

Final goal of this translation Han Zi letters to Latin letters correspond to the letters of the basic level in Chinese proficiency test with an application program MATLAB. The letters identified in the Final Project is the result of the transfer print-outs. Character recognition using artificial neural network LVQ implementation of a translator application that generates letters to Latin letters Han Zi, the input is the result of PCA feature extraction.

Collection of letters that are detected is divided into three types, namely the image of one character, the image of two characters, and the image of three characters. The process of training three types of collection letters are separated, but put together during the testing process.

Accuracy of training for latihan1 image is 96.988%, the image and the image latihan2 latihan3 reach 100%. While the average accuracy of word recognition through the PCA and the LVQ ANN is 95.25%.

Key words: letters Pin Yin (Latin), Han Zi letter, scan, PCA, LVQ ANN