ABSTRACT

Implementation of handwritten character recognition technology is very useful for

example for forensic analysis purposes or proving the authenticity of someone's

handwriting. Today, many documents involve the handwriting of people concerned. This is

due to many crimes committed against a person's signature, such as falsification of

signatures.

By involving handwriting, written directly by a person, it will be very difficult to

forge the handwriting is because each person's handwriting must have the characteristics of

each, either the types of writings or indentations formed by hand to carve up the post

according atmosphere author's heart. In general, handwriting character recognition system

using a bitmap pixel is not directly but it worked on the domain features. Characters

represented into more compact shape features are then used for recognition, thereby saving

computation.

In this research carried letters of introduction processes that make handwriting

(handwriting recognition) using 2D Gabor Wavelet and the process of character

recognition using artificial neural networks (ANN) Backpropagation method that can

distinguish one's writing with the writing of others. Input image which will be input in the

form of images must be in .jpg. Handwriting images are filtered with 2D Gabor Wavelet

then it sums by vertically getting feature vectors. Feature vectors generated become input

for the ANN.

The result by the system is ability to recognize handwriting with a level of accuracy

of 77.72%, which was created by combining the method of 2D Gabor Wavelet and ANN

Backpropagation.

Keywords: handwriting, feature extraction, Gabor Wavelet, Backpropagation

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