

## ABSTRACT

*This report presents a verification method of signature using artificial neural network of back propagation (BP) and adaptive resonance theory 1 (ART1). The verification system using computerized signature basically consists of learning and recognizing process. In order to implement the verification system, a series of steps must be follow. There are image acquisition, conversion from Red Green Blue to gray scale image, image resize, edge detection, reshape of image, and classification using BP or ART1. In this research, we analyze the performances of verification system toward the different image and the effect of artificial neural network parameter. Experiment shows that the verification result of back propagation is better than ART1.*

*Keywords: biometric, image processing, artificial neural network, back propagation, adaptive resonance theory 1*