# *Abstract*

*Signature is someone's specisific chraracteristics or symbol or flourish that cannot be generally read to identify him or her. Signature is used as a key mechanism of authentification and authorization in legal transaction such as filling in the attendance list or in drawing money from a bank. But due to the scarcity of automatic system of signature identification , the signature forgery often occurs and cannot be detected.*

*In the final task, an identification system of signature will be built by using Gabor Wavelet method of 2D-filter and Levenberg Marquardt method of Backpropagation Algorithm. The artificial neural network of Levenberg Marquardt Backpropagation is an appropiate Algorithm for solving the signature problem where the correct complete regulation of signature identification cannot be defined. Gabor Wavelet method of 2D-filter is used as pre-process for obtaining the important characteristics of image and the pre-process of output will then become input into practices of algorithm usage of Levenberg Marquardt Backpropagation.*

*Based on the output test , the built system gives 98% accuracy of practice data and 86% accuarcy of test data. The combination of Gabor Wavelet method of 2D-filter with Levenberg Marquardt method of Backpropagation Algorithm are able to give a quite good performance in solving the signature identification.*

***Keywords****: Signature Identification, Artificial Neural Network, Levenberg Marquardt Backpropagation, Gabor Wavelet*