Abstract

Every person has its own signature, different from others. People make their signature in different manner which depending upon the type of pen available, space available or accomplish it with different angle. Exactly the same signature is not possible consistently. However, in some applications, it is very important to recognize the accurate signature where, the evaluation depends on the accuracy and time. This paper presents a design of offline Signature recognition system using neural networks. A database is created by applying global
and morphological operations on the signature using different ranges. Database of total 1344 signatures of 7 persons are used for experimentation. Daubechies wavelet transform employed to extract a set of features which are utilized as input to neural network. A Feed forward back Propagation neural network and a Radial Basis Function (RBF) network are used for the examination. An accuracy of 97.61% with Feedforward back Propagation is observed in identifying the test signatures under different dilated and eroded images of the signature.

References

- Prashanth C. R. and K. B. Raja, &quot;Off-line Signature Verification Based on

**Index Terms**

Computer Science  
Pattern Recognition

**Keywords**

Offline Signature  
Feature Extraction  
Daubechies Wavelet  
Morphology  
radial Basis Network  
Feedforward Back Propagation Network.