Abstract

In this paper, an efficient approach for the recognition of on-line Arabic handwritten characters is presented. The method employed involves three phases: First, pre-processing in which the original image is transformed into a binary image. Second, training neural networks with feed-forward back propagation algorithm. Finally, the recognition of the character through the use of Neural Network techniques. The proposed approach is tested on 1400 different characters written by ten users. Each user wrote 28 Arabic characters five times in order to get different writing variations. Experiment results showed the effectiveness of our approach for recognizing handwritten Arabic characters.

References

- Dehghan M., Faez K., Ahmadi M. and Shridhar M., "Handwritten Farsi (Arabic) word recognition: a holistic approach using discrete HMM", Pattern Recognition, vol. 34,
no 5, pp. 1057-1065, 2001
- B. Vaseghi, S. Hashemi, "Farsi/arabic Handwritten Word Recognition Using Discrete HMM and Self-Organizing Feature Map," International Congress on Informatics,

Index Terms

Computer Science  
Artificial Intelligence

Keywords

Pattern Recognition  
Neural Networks  
Arabic Handwritten