A NOVEL METHOD FOR HANDWRITTEN DIGIT RECOGNITION SYSTEM

Domain : Artificial Intelligence
Team Members : Mubash shira S
Nandhini P
Nithya M
Sandhiya B

Paper 1 : Optimizing Feature Selection For Recognizing Handwritten Arabic Characters

Publication Year : 2005

Author:Mohammad Z.Khedher ,GHeith A.Abandah,and Ahmed M.AI Khawaldeh

This Paper describes that REcognition of Characters greatly depends upon the features used .Severalfeatures of the handwritten Arabic Characters are Selected and discussed.An Offline recognition System based on the selected features wasbuilt .The system was trained and tested with realistic samples of handwritten Arabic Characters . Evaluation of the importance and accuracy of the selected features is made.The recognition based on the Selected features give average accuracies of 88% and 72% for the numbers aNnd letters,respectively .Further improvements are achieved by using feature weights based on Insights gained from the accuracies of individual features .

Paper 2: Pre-processing techniques involved in the character recognition

Publication Year: 2013

Author: K.Gaurav,Bhatia P.K

This paper deals with the various pre-processing techniques involved in the character recognitionwith different kind of images ranges from a simple handwritten form based documents and documents containing colored and complex background and varied intensities.In this,different pre-processing techniques like skew detection and correction ,Image enhancement techniques of contrast stretching ,noise removal techniques , Normalization and segmentation ,MOrphological processing techniques are discussed.It was concluded that using a single Technique for pre-processing ,we can't completely pRocess the image.However, even after applying all the said techniques mightnot possible to achieve the full accuracy in a Pre-processing System.