Abstract

Handwritten document recognition is an area of pattern recognition that has been showing impressive performance in the machine printed text. Handwritten document recognition is an intricate task to various writing styles of individual person. The system first identifies the contour in a handwritten document for segmentation and features are extracted from the segmented character. This paper uses GLCM (Gray Level Co-occurrence Matrix) for character recognition. Features of a character have been computed based on calculating the pairs of pixel with specific values and specified spatial relationship occurrence in an image. First order and second order textures are used to measure the intensity of the original pixels. Data were collected from different persons, and the system is trained using SVM with various writing styles. The proposed system achieves a maximum recognition accuracy of 95.2% with training and testing data using GLCM as features and SVM with RBF kernel function.

References

Segregated Handwritten Character Recognition using GLCM features

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Index Terms

Computer Science
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**Keywords**

Handwritten Character Recognition  
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Gray Level Co-occurrence  
Matrix (GLCM)  
Support Vector Machine.