Abstract

In this paper a method is proposed for retrieval of handwritten document images based on the writer's handwriting using texture features of input handwritten document image block. Typically it can be observed that the patterns of any handwritten text blocks encompass spatial texture primitives. The conventional two-dimensional (2-D) discrete wavelet transforms (DWTs) and Correlation of GLCM is used to extract spatial features. Handwritten documents are collected from 100 writers each in English, Kannada and Hindi scripts. These handwritten documents are segmented into image blocks and 2000 image blocks of each script writers are used separately for validation of the proposed method. The similarity measures viz., Euclidean and City block distances are used and achieved Top-1 retrieval rates as 100% for each of the
Kannada, English and Hindi writers' document image blocks.

References

- Vlad Atanasiu, Laurence Likforman-Sulem, Nicole Vincent, ”Writer Retrieval—Exploration of a Novel Biometric Scenario Using Perceptual Features Derived from Script Orientation”, Proc. 11th Intl. Conf. on Document Analysis and Recognition, Beijing, China, September 18–21, 2011 © IEEE.

Index Terms

Computer Science

Pattern Recognition
Keywords