Abstract

This is a digital era, in which imaging has become simple and easy with so many handheld compact devices. Extraction of the text from captured images also becomes necessary for efficient indexing and retrieval purpose. But real time images have issues such as sensor noise, blur, viewing angle, different font size, low contrast etc. Though so many efficient methods exist, they faultier when it comes to complex background images. A wavelet based method is used here. This method preprocesses the image before it is given to an OCR filter. A color quantizer is used to minimize the number of distinct colors in the input image. A discrete wavelet transform is performed on the color quantized image which classifies the image into text and non-text pixels based on their color and the standard deviation of the wavelet. This step is followed by fuzzy C means clustering which partitions the image into the background and text regions. This preprocessed image is then passed through an OCR filter to check the quality of text being segmented.

References

A Wavelet based Method for Text Segmentation in Color Images

Proceedings of the International Conference on Pattern Recognition ??ICPR? 00? ??????


Index Terms

Computer Science

Image Processing
Keywords
Discrete Wavelet Transform  Fuzzy C-Means Clustering  OCR  Segmentation