Abstract

Binarization is a process of separation of pixel values of an input image into two pixel values like white as background and black as foreground. It is an important part in image processing and it is the first step in many document analysis and OCR processes. Most of the binarization techniques associate a certain intensity value called threshold which separate the pixel values of the concerned input grayscale image into two classes like background and foreground. Each and every pixel should be compared with the threshold and transformed to its respective class according to the threshold value. Thus threshold takes a major role in binarization. Hence determination of proper threshold value in binarization is a major factor of being a good binarised image and it can be approached in two categories like global thresholding and local thresholding techniques. In uniform contrast distribution of background
Local Contrast and Mean Thresholding in Image Binarization

and foreground documents, global thresholding is more suitable than that of local thresholding one. In degraded documents, where considerable background noise or variation in contrast and illumination exists, local technique is more suitable than that of global one. In this paper a local thresholding technique using local contrast and mean is described. Local adaptation is carried out with the local contrast and mean.

References

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Index Terms

Computer Science  Image Processing

Keywords

Binarization  local thresholding  local min  local max and local mean