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COMPARATIVE PERFORMANCE STUDY OF DIFFERENT ALGORITHM SEQUENCE OF THRESHOLDING AND FILTERING APPLIED ON CHARACTERS FOR NOISE REDUCTION

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Abstract

The noise reduction is important for enhancement of the image quality. This paper describes and analyzes methods of filtering and thresholding for degraded documents acquired from low resolution camera, and in noisy environment. The results show, by implementing the developed algorithm for thresholding and filtering can improve image quality and reduce the noise. The proposed noise reduction procedure consists of five steps, for different types of images. The main contribution of this paper is to propose a simple technique for reduction of noise. We have used different thresholding and filtering algorithms in different combinations and in different sequences. A refinement technique enhances further the image quality. The result of various experiments including different combinations and sequence of algorithms are analyzed and presented.

Key Words : Image acquisition, Image processing, Thresholding, Filtering methods.