Threshold based Approach for Image Blind Deconvolution

Abstract

Having attractiveness in digital cameras, the digital image processing is getting more imperative nowadays. One of the most common problems facing with digital photography is noise and blurring that needs restoration. In this paper, we present a new method for image blind deconvolution [2]. The Proposed Method employs threshold based image restoration technique in blind image deconvolution. The goal of this work is to restore the image from a noisy and blurred image where the blurring function is not known. The blur process can be formulated as the image takes convolution operation with the Gaussian noise. One of the basic blind deconvolution method is an iterative blind deconvolution method. [5], [31]. Although Iterative Blind Deconvolution method can recover the image from blurred image, it is sensitive to initial estimation and computation time required is more. In order to decrease this computation time and better visual results than Iterative blind Deconvolution, we proposed a threshold based Blind image deconvolution algorithm.

**Index Terms**

Computer Science  Image Processing

**Keywords**

Non-Blind  Blind Deconvolution  PSF  PSNR  MSE  Computation Time  Threshold.