Abstract

There are lots of image processing algorithms to improve image quality. Image restoration is a field of image processing which deals with restoring an image that has been degraded by some degradation phenomenon. Degradation may occur due to motion blur, Gaussian blur, noise or camera mismatch. The aim of image restoration is to reconstruct or estimate an uncorrupted image by using the degraded version of the same image. [2] In this paper, we described a method to remove the motion blur present in the image taken from any cameras by which motion blurred and noisy image is first restored using Wiener and Lucy Richardson method then applied wavelet based fusion technique is applied for restoration. The performance of the every stage is tabulated for the parameters like SNR and RMSE of the restored images. It is observed that image fusion technique provides better results as compared to previous techniques. Performance of all the methods has been compared on the basis of performance parameters MSE and PSNR.

References
Wavelet Transform based Fusion Technique for Image Restoration

5. M. Tico, M. Vehvilainen, Nokia Research Centre Finland, tico@ieee.org, “Estimation of motion blurs PSF from differently exposed Image frames.”

**Index Terms**

Computer Science  
Image Processing
Keywords

Image restoration, Image fusion, Wavelet, MSE, PSNR, Wiener, Lucy Richardson