An Effective Technique of Image Degradation using DWT based Padding Kernel Detection

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Abstract

Image Filtering is a technique of removing unwanted Noise from image so that the image can be improved in terms of brightness and noise and contrast. Although there are various technique implemented for the Image Degradation and removing Noise level from image such as using Gaussian Blur. The Existing Gaussian Blur technique is an efficient technique which provides more Peak Signal to Noise Ratio and Less Error rate as compare to Zhang Distance and Local Phase Quantization Algorithms. But the technique implemented is not feasible in terms of all images and PSNR and Error Rate, Hence a new and efficient technique is proposed in the paper which is based on the concept of kernel and padding. This work also applies the Haar wavelet Transform for filtering the image in order to reconstruct image which have the noise and blur. The results of this paper show that the proposed method gives the better result from the previous methods. It seems to be that the PSNR, Mean Square Rate and execution time is better in the proposed scheme.

References

Index Terms

Computer Science  Image Processing
Keywords

DWT Transformation, Haar Wavelet, Deblurring, Filtering, Gaussian Blur, Image Degradation.