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## Abstract

In photographic world the most common problem may appear is blur effect, that happen when a picture taken. This effect divided into two categories, Gaussian blur caused by unfocused camera when taking a picture and Motion Blur that happen when there is a movement of object or the camera itself related to shutter speed of the camera.

To handle this effect, first it need Point Spread Function Information and then move to deblurring process. For Motion blur it need angle and pixel movement estimation using Coefficient Correlation, while for Gaussian blur, it only need pixel movement estimation. Deblurring process using Pixel Movement Assumption method for Motion Blur, and Lucy – Richardson method for Gaussian Blur.

The accuration level in degree detection is 85.64 %, while pixel detection reach 77,62 %, for Gaussian Blur the accuration level is 74.07%.

Average PSNR for deblurring Motion Blur image is 1.123 dB smaller when using Pixel Movement Detection compare to Wiener method, for deblurring Gaussian Blur image, the Lucy – Richardson method resulting 2.65 dB smaller than Blind Deconvolution method.

Keyword : Gaussian, Motion, Shutter Speed, PSF, Coefficient Corelation, Pixel Movement Assumption, Wiener, Lucy – Richardson, Blind Deconvolution, Coefficient Correlation, PSNR.

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