

ABSTRACT

Image is a picture on two dimension plane. Digital image usually has foursquare shape with size dimension that is explained as length(M) x width(N) with graylevel $f(x, y)$. Blur on an image can be happened on all of image, or blur on local area. A blur image is happened because a shake from image while photography, or lightless on a room while photograph too. This case is usually happened on amatir photographer.

To handle the blur on an image is by sharpening. Sharpening is an effort to get the sharp detail from an image that loss because of blur. In this final project, will be done sharpening on non-uniform blur face image.

The testing will be done by using two types of image. The first is sharp face image that is blurred by software. And the second is natural blur face image that is blur because of shaking while capturing image. From the test of image, we can see that correlation coefficient method is not correct to look for the value of angle shifting and the value of length shifting pixel.

Keywords : non-uniform blur, sharpening, motion blur, correlation coefficient, Lucy-Richardson.