

CHAPTER 1

INTRODUCTION

1.1 Background

Getting a good digital image will certainly make it easier for us to process the next image then it can be done by clarifying images or improving image quality. In this study it was shown to resolve the problem of poor image such as images are too dark or bright also low contrast or high contrast. Getting a bright / dim image can occur due to lack of lighting, low image resolution, and poor of image pixel. Image enhancement is the best way to improving image quality to have better image in post processing.

There are many methods for performing digital image enhancement, but in this study are using histogram equalization and contrast stretching methods. At first a number of digital images were collected which differed in quality and lighting so that later differences would be seen using both methods. The image will be executed in Histogram Equalization and Contrast Stretching methods with the parameters to count the image quality. Contrast Stretching method distribute the pixel intensity from old range to new range so it stretched in the new range. The Histogram Equalization method leveling the pixel intensity value so that is evenly distributed throughout the image.

The Histogram and Contrast strething method provides an output of digital image repairs with different quality. The results can be measured through parameters namely PSNR(Peak Signal Noise Ratio) to calculate the quality of output image both of the method. It also can be considering which is the better method in image enhacement.

1.2 Scope

1. What is the effect of Histogram Equalization and Contrast Stretching for image enhancement?
2. What methods are used for improving images?
3. What is the good method to improve image contrast?

1.3 Objective

Produce image enhancement analysis using Histogram equalization and contrast stretching methods.

