

Abstract

Image Segmentation is a process to divide an image to several *region*. The purpose of Image segmentation is to simplify or to change an image representation so the image is easier for image analysis.

Some of popular and classic image segmentation algorithm are watershed algorithm, *region* growing, splitting and merging etc. J-Segmentation (JSEG) algorithm appeared as new color image segmentation algorithm. This algorithm introduced by Yining Deng, B. S Manjunath and Hyundon Shin at 1999, and still developing until now in image retrieval purpose.

JSEG Algorithm is claimed as good algorithm that can be applied on several type of image file. But until now, there is no robustness testing to this algorithm about handling noise and blur to support the claiming that JSEG is good image color segmentation algorithm.

This final project analyse the effect of parameter threshold color quantization and region merging using JSEG Algorithm to image segmentation result and also analyse JSEG robustness towards color image with several level noises and blurs.

Keywords: segmentation, image, JSEG, noise, blur, robotsness