Abstract

Stereoscopy is a technique that makes a two dimensional picture have a three dimension efect. One of stereoscopy technique that is widely used is anaglyph stereoscopy, where viewer see a stereouscopy image through a color filtered glasses.

Anaglyph stereoscopy is widely used because its easy and cheap, but because of those, anaglyph stereoscopy have a lot of shortcomings. The most significant shortcommings is color accuration and ghosting.

This final project implements some anaglyph generator algorithm to make anaglyph stereoscopy video which is analyzed to find which algorithm that produce anaglyph stereoscopy video that have highest color accuration and lowest ghosting. The effect of camera position at picture taking to stereoscopy effect and ghosting recieved by human eye is also analyzed.

This final project shows that (1) avoid using red colors and increase the use of green and blue color on the scene (2) ghosting can be redused by minimalising the color difference between object and background (3) overall the best anaglyph generator algorithm is Photoshop algorithm (4) the ideal range between cameras is 1/30 of the range between camera and POI, and the ideal camera angle is crossed.

Keywords: stereoscopy, anaglyph, ghosting, color accuration