

Abstract

Technological advances in digital cameras in recent years still has many limitations. One of the limitations of digital cameras are not able to capture images with a wide perspective which commonly called the panoramic image. Panoramic image itself is widely used in field mapping, aerial photographs and in Image-Based Virtual Reality System (IBVR).

Image registration is one of image processing techniques that can be used to obtain panoramic image by combining several neighboring image taken separately. In this final assignment, image registration method used is 5-parameter camera rotation model which played in the process of image transformation.

Test results showed that this method can produce good images in the panoramic view of vertically or horizontally, but can not handle cases where there rotation or scaling of one of the images. From the results of the calculation of correlation and similarity of the comparison between resulting panoramic image and the original image, the percentage obtained good value.

Keywords : *panoramic image, image registration, 5-parameter camera rotation model*