

## **ABSTRACT**

Problem in multiresolution at taking pictures for panoramic view in large scale has commonly happens in daily life caused by limitation in position to take pictures. This kind of things forced user to take pictures several times then manually registered the pictures. After that, in taking pictures, camera also has its own limitations that make some area in pictures get some blur. This also demand user to taking pictur several time and try until they get the correct one.

In this final project, there is some solution to registered pictures that separately different and combine informative values in pictures combination. Using wavelet decomposition method will help to its pre-processing the image so at the processing, the system will easier to process. In same way both for registration and fusion, wavelet decomposition will decompose the image to wavelets. For registration it will help to find the control points. While for fusion, it will help to find the more informative point.

From the system testing, there are some anomaly that shows color intensity of image from its histogram related to the system performance. For image data that have a dark color intensity, the accuracy and processing time is better. The system also shows some optimal time and accuracy in registration process when use some combination of parameters. While in incorrect parameters, registration will failed or even error in concept principal.

Keywords : combine image, wavelet, image fusion, image registration