## ABSTRACT

Starting from the development of a black and white camera that used to evolve into a color camera, and of once the auto focus was silent until the auto focus can follow the movement of the object. Due to the increasingly sophisticated needs of a camera in order to get a good moment in shooting good and satisfactory results, so that underlies the making of software that can capture the movement of moving objects.

In the design of the moving object tracking system that is the first thing OpenCV configuration on the laptop by adding a setting OpenCV on laptop systems, after the configuration is completed then run the program Visual Studio 2010 for setting up the program OpenCV into Visual Studio 2010, Configure the way into the property manager Visual studio 2010 configure OpenCV by adding library Opecv and setting OpenCV into the Visual Studio 2010 after the configuration is complete, the next thing setting the camera Ps3 and web camera to function with the Visual Studio 2010 with a way to make the program C ++ simple in order to display the camera input and web camera PS3 after setting up the camera, then make a colored object tracking program by adding switches and fps.

The study produced a colored object tracking system that can detect the presence of objects based on color and also know how quickly between programs and colored objects. From the test results obtained at a distance of 1.5 meters between objects with the camera, from 4 colors tested in yellow is the worst color because of 6 times the test can not detect all perfectly. And the best color at this time of testing is the blue color is caused than 6 times of testing all objects can be detected well. In terms of frames per rates highest value resulting from the measurement of colored objects is 13.06 fps, and the lowest value of the blue color is produced by 10 fps.

Keyword: OpenCV, Visual studio 2010, camera ps3, web camera, C++