ABSTRACT

In human and computer deveplopment there are a theory that called computer vision. Is a theory when we can give an input into the computer system methode using the data that have been obtained from the image. And gesture recognition technology is included in it, which more focused on retrieving data from part of human body behavior on the image.

In this final project, gesture recognition technology implementation is done by making a motion detector which is not only able to detect moving object but also able to giving input into another applications. In this case the game and media player application. The motion detector in this final project was built on C # programming language and library Emgu.CV.

The motion detector is named Motitector80012 and have three different modes. The navigation mode that can be used to control the game, the media player mode to control media player application and mouse mode to control cursor and click on computer mouse. The performance of Motitector80012 is affected by the differences of light intencity in the room, the distances of the object to the camera, and the position of the object against the camera. From the accuracy testing of Motitector80012 application on all of three modes of it in normal distance 0,3m to 0,6m and in the room which have bright light generally got percentages greater than 80% accuracy. So the performances of Motitector80012 is have good enough rate.

Keyword : Computer Vision, Gesture Recognition, Motion Detector, Emgu.CV