ABSTRACT

Over the times,also develop a technology in the field of information which is progressing very rapidly. This development encourages the development of technology Image Processing and Computer Vision. Image Processing is one kind of technology to solve problem in the processing or image processing,while the Computer Vision has the main purpose for make useful decisions about real physical objects and scenery image sourced / obtained from the sensor. Image processing and Computer vision has been widely used in many of today's modern applications such as in the field of security. And for example is face detection system for security systems.

In this final project will be created a system, where the system will looking for the object in *realtime*, when camera detect the object camera will start to capture image appropriate frame which has been set. Image that have been captured is save on a folder and loaded one by one to be processed detect the face, if there are faces detected then iamge will be marked with red box around the face and send to cloud storage. The resul that obtained from testing and anlyse the device is maximum length to detect face is a ± 1,5 m with data set positive and 2000 negative, similarly face detection on a image that contain face is so accurate with value of FPR 100%.

Keyword : *face detection, haar cascade classifier*, Raspberry pi ,webcam,*cloud storage.*