ABSTRACT

Blind is a general term used for the condition of a person in the sense of vision impaired. Tools used for the visually impaired is simply to use a cane. Due to reduced function of the sense of sight so blind trying to maximize the functionality of the other senses such as the sense of touch, smell, and hearing. But at this moment with the development of increasingly advanced technology, these shortcomings are not an obstacle to perform daily activities without help from others.

With this issue, one solution has been made a tool of the blind system that utilizes video processing. Object classification method that has been used is the Hidden Markov Model. This is because the statistical model of a system that is assumed by the Markov as a process with unknown parameters. Equipped by using corner detection for feature extraction method.

Final project was the creation of a system that can detect the condition of a video is then converted into an audio signal with an accuracy rate of 75% accuracy and with fast computation time.

Keywords: Blind, Hidden Markov Models, Detection Direction