ABSTRACT

As we are aging, the flexibility of the eyes decreses as well as the thickness and its clarify. As the age goes, the compositionof the eye changes and the structure of protein fibers decrease. Some of it will clot and makes stains on the lens ares. Many cases of cataracts develop slowly and doesn't causing any trouble at first. Cataracts usually grow slowly and do not cause any pain. In the early stages this condition will only affect a small part of the eye and may not affect the eyesight. When cataracts grow larger, the white stains will begin to cover the lens and disturb the entry of light into the eye. Initially bright light and glasses can help vision. And wen this happened, It would be disturb daily activity and operation becomes the only solution.

This final project will using Hough Transform method. The method will extract the characteristics of the image to obtain the information required in the test. Then use K-Nearest Neighbor as the classifier of the test image.

With the detection of a circle on the iris using Hough Transformation and Image Quentization will get the success rate of image fit can reach above 80% with a total process time of less than 30 seconds.

Keywords: Iris Detection, Catarct, Hough Transform, K-Nearest Neighbor