ABSTRACT

Eye is one of the most important senses for human life. Because with the eyes, we can see and know the situations and conditions that occur around us. If there are problems or disorders that happen in our eyes, then we will feel uncomfortable. The eye has several diseases that can reduce the quality of vision and can cause blindness.

In this Final Project will be make an application to detect Pterygium eye disease based on the early symptoms that have been felt by the patient and find out how severely the patient affected by Pterygium disease with different levels. The stages used to determine the level of Pterygium disease is by filling all the symptoms by the patient in the application using Forward Chaining method and using an image segmentation process with Viola Jones Algorithm.

The end result of image processing and expert system is called or not pterigium and severe search rate pterigium disease itself. On the results of the results for the difference between pterytigium and not with images containing eye wih object reach up to 76%, and the result is 100% no detection for no object in the images, and for the expert system using forward chaining is 100% because because it has been calculated manual before.

***Keyword** : Pterygium, Viola Jones Algorithm, Forward Chaining.*