

## **ABSTRACT**

Face recognition is one of the most used biometric method because of its high accuracy. This method often used for security system of some organization. But in everyday life, the frontal face recognition system is hard to implement because of privacy. Because of that, for privacy reason we propose a side view face recognition system to limit part of the face which can be seen. In this final project we implemented a system which can recognize side view face.

This system uses Local Binary Pattern (LBP) method to obtain features from each faces. By using LBP some values from each pixels will be obtained by comparing the pixel with its neighbors. Then from those values will be created a histogram which will be made a feature from a face. For the classification system logistic regression is used. The reason is because of the ease of implementation and good performance from the method.

From this research we obtained the highest accuracy of 95% using normal LBP with  $P=8$  and  $R=19$  and the average computation system is 0.1 seconds. The system's accuracy after given Gaussian noise, salt & pepper, and passion are respectively 27%, 56%, and 79%. And the highest accuracy to recognize blurred images is 95%.

Keywords : side-view face recognition, LBP, logistic regression