

ABSTRACT

Presence of students is now carried out in the Telecommunications Technology Study Program Telkom University, still using RFID so as to provide opportunities for undesirable actions such as loss of RFID, fill the presence deposited by other students, and less efficiently have to carry the presence everywhere when there are lectures. Previous studies have used face recognition systems in attendance, namely the design of facial pattern recognition for attendance applications with the eigenface method. But there are still deficiencies in several factors namely, light and distance.

In this final project will be carried out the design and implementation of image processing for attendance attendance. From some researchers show that with the LBPH method with better accuracy than eigenface. So that's where the authors are interested in trying a face detection system for presence with the LBPH method. This design simulation will be carried out using PyCharm software using the Python programming language.

The results of the trials were carried out using three types of tests, namely: distance, face angle and accessories. The trial was carried out 10 times with indoor conditions, with testing the distance used from 5cm to 100 cm, testing the angle from 0 degrees to 15 degrees, and testing accessories using glasses. The results of all facial recognition tests were well recognized with a success rate of 92%. And for sending absent data to the database sent as expected.

Keywords: *Image Processing, Facial Recognition, LBPH (Local Binary Patterns Histogram).*