

ABSTRACT

The development of computer technology has shifted from ordinary computing to smart computers. One of the concepts of intelligent computers is when the computer is able to recognize an object. The computer's ability to recognize an object can be used to increase the security of a room by applying it to the system. With the current system the door cannot recognize someone who will enter the room.

In this final project, a facial recognition system was built to increase the security of a room from crime. Face recognition algorithms and Eye-blink detection are used to prevent spoofing. If the face has been saved in the database, the electric door lock will open. Used electric dropbolt as an electric door lock. From the results of the study, the success rate of the face recognition system was 95%.

Keywords: *Electric dropbolt, Face recognition, Eye-blink detection, spoofing*