

HOUSE DOOR SECURITY SYSTEM USING ANDROID APPLICATION BASED ON AUGMENTED REALITY AND FACE DETECTION

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ABSTRACT

Security is an important thing, one of which is the security of the door of the house. The security system for the door of the house at this time is still using a confessionnal door lock. One of the drawbacks of a confessionnal key is that it is easy to break into. In addition, many people ignore the importance of monitoring the situation around the door. a system is needed to improve the security of the door of the house that can overcome these problems by using an android application based on Augmented Reality and Face Detection. The results of this study the hardware designed can be controlled by the Augmented Reality android application by scanning a marker which will bring up a 3D object in the form of a keypad to input password. The distance of the Smartphone camera with the Marker to bring up the Keypad, is 7cm to 110cm. In addition, the results of research on Face Detection the camera can detect faces from a distance of 10cm to less than 220cm, besides that the camera can send photos to the Telegram Chat Bot when a face is detected.

Keywords: *Augmented Reality, Face Detection, Nodemcu ESP8266, Solenoid Door Lock*