

# PEMANFAATAN FACE RACOGNITION DALAM PERANCANGAN SMART DOOR LOCK BERBASIS ARTIFICIAL INTELLIGENCE

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## **ABSTRACT**

*Safety and comfort are the main factors that are most considered, especially when inside or outside the house. Everyone who leaves their house also wants to make sure their home is safe and has a security system that can only be accessed by the owner of the house. Facial recognition applications for automated home security systems can be used. This is because conventional home security systems are sometimes less secure. The home security system in question is locking and opening the door of the house automatically based on facial recognition. The overall performance of the tool by reducing the match rate increases the accuracy of the success rate for faces that match the database and to run commands from the beginning of detection, image matching, and relay control, the average time is 3.813 seconds. As for the performance of the tool in sending image and text data to Telegram, the average time is 4.045 seconds. This shows the system can be implemented in a security system with low delay.*

**Keywords:** *Raspberry Pi 3B, Smart door lock, Artificial Intelligence.*