

## ABSTRACT

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Face recognition is a technology that is able to identify faces with a variety of methods. This system is built on the door house which serves as additional home security. Also which can send notifications in the form of messages via the telegram application, if there is someone at the front door whether the face is recognized or the face is not recognized. If the camera captures the object, the system will identify whether the object has a face or not, and if the system detects faces, the next process will be carried out to determine whether the face is recognized or not by comparing face data with the database model database that has been prepared. This system was built using machine learning based on tensorflow with transfer learning methods, and object captured using the 8MP v2 camera raspberry pi module.

*Keywords:* Raspberry Pi, *Machine Learning*, Face Recognition, Transfer Learning, Telegram