

ABSTRACT

This research made a Face Mask and Body Temperature Detection tool, with the design of this tool making it easier for officers to ensure that visitors use masks and do not have a fever before entering the room. In this tool study, if the conditions are met, it will come out green square, if red square will come out along with a warning sound. This tool is equipped with a webcam that is used for real-time video capture as well as Arduino and GY906 sensors as temperature data retrieval, using the Haarcascade Frontal Face method as the research method, the Haar Cascade method is used to detect face and mouth objects as a reference for detecting mask wearing. This system successfully detects the use of masks at a distance of $0 \leq 240$ cm, and bright light intensities such as daylight are needed in carrying out facial classification. This mask detection system is able to detect the use of masks below a distance of 2 meters from the camera and when above 2 meters from the camera the system is less accurate in detecting the use of masks. For the GY906 sensor and thermometer, the difference is not much different.

Keywords: COVID-19, Haar Cascade, GY906 Sensor, Mask and Temperature Detection