

DETECTION MONITORING USING Internet of Things (IoT) APPLICATIONS

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ABSTRACT

With the help of IoT, ESP32 can send and update screaming information in real time via hardware and smartphone notifications via the Telegram application. Using ESP32 as a microcontroller, integrating with voice detection sensors and sending sensor data to firebase. The sensor data will then be stored in Firebase and displayed in the Android application to provide real time information on how the baby cries. The system is used for baby monitoring and can detect crying babies and send notifications to the Telegram application. The detection is based on the Internet of Things. The tool works well in accordance with the recommended design. The drawbacks of things tool are the sound sensor which is not strong enough to detect baby voices at a long distance, and takes 10 seconds to 2 minutes, In this designing this tool, the ky-037 sound sensor works with an 80 % success rate if the distance between the ky-037 sound sensor and the baby's voice is 1 to 3 cm.

Keywords: hardware, smartphone, Internet of Things, ESP32