

ABSTRACT

FANN CONTROLLING SYSTEM USING SPEECH VIA ANDROID

In the current era of globalization, technology is developing rapidly. Many tools or robots are made to help human work that works automatically.

Fan is one of the household electronics that is almost owned in every home, as well as an android smartphone that is owned by everyone. To carry out the use of a fan, the user usually must immediately come to the fan to press the button on the fan. The author feels it is not easy to do and the position of the fan that sometimes hard to reach so the author has an idea to develop an existing fan using an application on Android as a medium to run the utility of a fan without having to go to the fan. The fan will be moved through voice input which will be converted into text so that it can be read by Arduino with the principle of speech to text or *speech recognition*.

At the completion of this final assignment, the test results from the application show 100% success against 10 different voices of people with commands that have been adjusted according to the authors specify. And Bluetooth communication is still running well at a certain distance where when there is no obstacle Bluetooth works optimally that is up to a distance of 30 meters while with some barriers such as glass, walls and between different rooms Bluetooth has a maximum working distance of different meters, namely 20 meters for glass , 14 meters for walls and 10 meters for inter-rooms.

Keywords: speech to text, *speech recognition*