

ABSTRACT

Everything is under control. Control may be the actuation of an object or object motion control in accordance with what we want. A control can be performed with a variety of things one of them is by using voice commands done as a form of control, today's growing. But in the final on-campus IT Telkom previously, there has been no implementation of voice recognition in real time. So its use is still less dynamic system because it requires the data in the processing of sound.

Control is done through the process of voice recognition using the Euclidean distance method in which the voice signals in advance through the process of feature extraction of LPC of order 10. Voice recognition process is done using a PC (Personal Computer) then the result of the introduction of serially transmitted to the microcontroller. Microcontroller that used in this final is ATmega 8535, the reason for using this microcontroller is because prices are relatively cheap and easily obtained.

In this final, produced an implementation of voice recognition to control the movement of the car robot. Percentage of voice recognition can reach 76% obtained from the test results of voice input in the form of the word car robot motion control command. This system works with the sound input in real time.

Keywords: Euclidean distance, microcontroller, voice recognition, car robot, real time