ABSTRACT

***VOICE RECOGNITION SOFTWARE (VOICE RECOGNITION) FOR EMPLOYEES ATTENDANCE WITH TIME USING DYNAMIC WARPING* (DTW)**

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The results of intensive research in the field of signal processing led to rapidly evolving communication technologies. One is of voice recognition (voice recognition). The process of matching the sound is a function of identification voice. Where is the voice identification can be added value in a command on a computer, identification voice is the natural way of communication between humans and can produce a good interface to control a system or application.

*In the process of speech recognition for employee absences used method of Dynamic Time Warping (*DTW*), is one method of analysis that compares the voice signals between the incoming signal in the form of sound with sound records in the database by calculating the optimal time warping path between the two.*

This study discusses the matching sounds to recognize the spoken voice. Testing is done based on the 5 test conditions intonation and pronunciation that is different. Testing 1, 2 and 3 respectively carried by voice recognition on the condition of silence, speech recognition in noise conditions are not quiet atmosphere (air-noise) and intonation of speech recognition with the length by 15 people comprising 10 men and 5 women, while testing 4 and 5 respectively carried out by means of speech recognition by 15 women and 15 men by voice recognition.

The results of testing showed that 15 times the testing 1, 2, 3, 4 and 5 with the number of votes and percentage accuracy of the recognized respectively as follows: 14 votes identified, 93.3%; 0 votes recognizable, 0%, 5 votes recognizable, 33.3%, 9 votes identified, 60% and 11 voice recognition, 73.3%.

*Keywords: speech recognition (voice recognition), Dynamic Time Warping (*DTW*), the optimal warping path, voice identification, signal processing.*