

ABSTRACT

Language is used as a communication for interacting between humans. The use of language in communication relationships is needed to equalize the perception between speaker and listener so that the information delivery process can run smoothly. But not everyone has the same language in communicating, there are various types of languages from different countries in the world. That's why we need a system that can translate the language and integrate it with a microcomputer to become a tool.

In this Final Project, a prototype tool that can translate English into Indonesian language based on speech recognition (Speech to Speech). The part in this Final Project is to change the sound into text (Speech to Text) with Hidden Markov Model (HMM) classification method that is able to recognize speech of a word.

By using HMM, the accuracy in classification of words to be translated from English to Indonesian is very good. The use of the HMM method produces an accuracy of 70% to recognize the word and 68.42% to recognize the sentence. So the results obtained in accordance with the expected.

Keywords: prototype, speech to speech, speech to text, hidden markov model