# Abstract

*Latterly, the attention in the speech recognition technology to facilitate human development. By using speech, people can do anything without having to interfere with other activities as well as communication between humans, with voice communication to be smooth. In Different languages are among the difficulties communicated. Then if the sound can be detected and converted into other language that is recognized by the speaker, the communication will become easier. Therefore, it takes an appropriate method to recognize the speech until appropriate.*

*This final project implementation HMM method and SVM for speech recognition. The input for this system is a signal digital and represented speech, speech had been record in a state resistant form other. Training data is used to use builder-syllable words and the word is. The signal is synchronize with normalize and detection system with syllable. Syllables segmentation results performed using the MFCC feature extraction and classification every syllable with SVM and words using HMM. There are 10 words that will be recognized and 19 syllables builders. Database for this system use 600 syllables and 100 words. The result of this project give the accuracy for HMM and SVM on-against-all 905 and HMM and SVM on-against-one 63.7% This HMM using ergodic model with 3 and 20 hidden states.*

**Keywords**: *motion detection, motion recognition, hand detection, HMM, SVM, SVM-HMM*