Abstract

Speaker recognition is a computer technology that can recognize the characteristics of people through the spoken voice. Speaker recognition including pattern recognition problem that one of the most important part is process of data classification. Multiclass problem on the classification cause long processing time and computational load is heavy.

In this final task, that problem will be resolved by dividing the data into smaller data groups based on specific class. To divide the data will used SVM method as discriminant by implement binary tree structure. At the end of process, will used HMM method as classifier which is to classify data into specific class after divide the previous data. The input of this system is voice vector data that had been extracted earlier. System testing will be done by using 400 datas of speakers voice in total. The output of the system is data that shows input voice has been recognized as the voice of a specific person.

Result of the system performance testing shows that average processing time by dividing data first is faster than doing classification directly.

Key words : *speaker reocognition, classification, binary tree structure, support vector machine, hidden markov model.*