

## ABSTRACT

Name : Alfian Nur Fauzan  
Program : Computer Science  
Title : Automatic Al-Qur'an Recitation Evaluation Using MFCC and  
SDCC Feature with SVM and GMM Classification Method

Many Moslems want to recite Al-Qur'an. Unfortunately, someone who is reciting Al-Qur'an needs a partner to help evaluating the recitation. To help that process, this research develops a system that is able to automatically evaluate Al-Qur'an recitation. The system uses *mel frequency cepstral coefficient* (MFCC) and *shifted delta cepstral coefficient* (SDCC) feature, with *support vector machine* (SVM) and *Gaussian mixture model* (GMM) classification method. The experiment is applied to every ayah in juz 30 of Al-Qur'an, and the result shows that the best combination to use in the system is SDCC feature with GMM classification method.

Keywords:

Al-Qur'an, evaluation, MFCC, SDCC, SVM, GMM