

ABSTRAK

Orang yang menghafal Al-Qur'an umumnya akan merujuk kepada seorang ustadz yang ahli sehingga kesalahan bacaan dapat terdeteksi. Didalam dunia pengolahan suara untuk mengenali sebuah suara dapat ditanamkan pola pelatihan terlebih dahulu. Didalam penelitian pengujian hafalan Al-Qur'an surah Ad-Dhuha melalui suara menggunakan *Discrete Cosine Transform* (DCT) dapat diukur untuk kerjanya berdasarkan 10 sampel suara. Berdasarkan hasil kompleksitas algoritma, sistem pendeteksi kesalahan bacaan berdasarkan pengenalan Lafadz Al-Qur'an Surah Ad-Dhuha menggunakan algoritma *Discrete Cosine Transform* (DCT). Hasil penelitian menunjukkan bahwa sistem Kinerja Algoritma *Discrete Cosine Transform* (DCT) untuk pendeteksi kesalahan bacaan pada surah Ad-Dhuha memiliki kisaran *true detection* sebesar 80 %.

Kata kunci : *Discrete Cosine Transform (DCT), true detection.*

ABSTRACT

People who memorize the Qur'an will generally refer to a religious teacher reading expert so that errors can be detected. In the world of sound processing to recognize a pattern can be embedded voice training first. In research testing, recitation Al-Qur'an Surah Ad-Dhuha through the sound use Discrete Cosine Transform (DCT) can be measured for works by 10 sound samples. Based on the results of algorithmic complexity, the reading error detection system based Lafadz introduction Qur'an Surah Ad-Dhuha using algorithms Discrete Cosine Transform (DCT), The results showed that the system Algorithm Performance Discrete Cosine Transform (DCT) for error detection readings on Surah Ad-Duhahas a true detection range by 80%.

Keywords :*Discrete Cosine Transform (DCT), true detection.*