

ABSTRACT

Technology development on text to speech has been conducted in this era, for Indonesian language and also other languages over the world, the result has been very satisfying. Contrary, the result has not meets the end where the quality of speech is equal to natural speech of human. Many methods has been proposed to approach the goal, concatenative synthesis is one of them.

One of the languages which are now also widely developed is Arabic. In pronunciation, the Arabic language has two branches, which is the pronunciation for the daily used and for the Qur'an recitation. The difference between both of them is the law that regulates specifically for reading the Qur'an, known as the law of recitation (the law of tajwid).

In this project, a text to speech system is made. It is able to process Latin letters from the Qur'an with the application of the tajwid. The method used is diphone concatenation, where the algorithm applied is WSOLA modifications, to achieve the results according to the law of recitation.

From the application, the results of WSOLA synthesis algorithm are fairly clear, fluent in spoken and maintain the tajwid on reading the Qur'an in quite good result. The result of MOS's test for WSOLA algorithms before modification has shown results the value of 3.20 with still less consistent reading of long period letters. But the results can be improved on modifications that made to the algorithm. So, the pronunciation of long period letters is mantained with WSOLA modification.

Key words : *diphone concatenative, WSOLA, MOS, the tajwid's law*