Abstract

In a text-to-speech system, spoken utterances are automatically produced from text. In this paper, we present a corpus-driven Malayalam text-to-speech (TTS) system based on the concatenative synthesis approach. The most important qualities of a synthesized speech are naturalness and intelligibility. In this system, words and syllables are used as the basic units for
synthesis. Our corpus consists of speech waveforms that are collected for most frequently used words in different domains. The speaker is selected through subjective and objective evaluation of natural and synthesized waveform. The proposed Malayalam text-to-speech system is implemented in Java multimedia framework (JMF) and runs on both in Windows and Linux platforms. The proposed system provides utility to save the synthesized output. The output generated by the proposed Malayalam text-to-speech synthesis system resembles natural human voice. Our text to speech reader software converts a Malayalam text to speech wav file that has high rates of intelligibility and comprehensibility.

Reference

- Robert J. Utama, Ann K. Syrdal, Alistair Conkie,” Six approaches to limited domain concatenative speech synthesis”. INTERSPEECH, ICSLP, 2006
- K. Panchapagesan, P.P Talukdar, N.S. Krishna, K. Bali and A.G.

Index Terms

Computer Science
Signal Processing

Key words

Text-to-Speech
Concatenation
Speech
Synthesis
Text Normalization
Romanization