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

- 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