Abstract

This research paper describes the Impalement of the first, usable, Marathi Text to Speech system for Maharashtra Marathi using the open source Festival TTS engine. Besides that, this research paper also discusses a few practical applications that use this system. This system is developed using di-phone concatenation approach in its waveform generation phase. Construction of a di-phone database and implementation of the natural language processing modules are described. Natural language processing modules include text processing, tokenizing and grapheme to phoneme (G2P) conversion that were written in Festival's format. Finally, a test was conducted to evaluate the intelligibility of the synthesized speech.

References

A Text-To-Speech Synthesis for Marathi Language using Festival and Festvox

2319 –4200, p-ISSN No. : 2319 –4197 www.iosrjournals.org


11. K. Partha Sarathy, A.G.Ramakrishnan "TEXT TO SPEECH SYNTHESIS SYSTEM FOR MOBILE APPLICATIONS" http://mile.ee.iisc.ernet.in


16. Sangramsing Kayte, Monica Mundada, Santosh Gaikwad, Bharti Gawali
"PERFORMANCE EVALUATION OF SPEECH SYNTHESIS TECHNIQUES FOR ENGLISH LANGUAGE " International Congress on Information and Communication Technology 9-10 October, 2015


19. Sangramsing Kayte, Monica Mundada, Dr. Charansing Kayte “Di-phone-Based Concatenative Speech Synthesis Systems for Marathi Language” OSR Journal of VLSI and


23. Sangramsing Kayte, Monica Mundada, Santosh Gaikwad, Bharti Gawali "PERFORMANCE EVALUATION OF SPEECH SYNTHESIS TECHNIQUES FOR ENGLISH LANGUAGE " International Congress on Information and Communication Technology 9-10 October, 2015


**Index Terms**

Computer Science  
Pattern Recognition

**Keywords**

Marathi Speech Synthesis, Text-To-Speech (TTS), Hidden-Markov-Model (HMM), Marathi HTS TTS, speech synthesis, di-phone, Unit Selection.