Abstract

This research paper describes the implementation 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


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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.