Abstract

Speech is the most natural and effective medium of communication among the human beings. Speech has played a great role in the evolution of human civilization. Speech synthesis is an artificial way of producing speech. The native speakers of any language use their knowledge base of various prosodic features during the speech production. These features they acquire unconsciously in childhood. With the help of these features, they are capable of expressing the meaning of any utterance and emotional states. It is still a challenging task to bring similar naturalness in artificial speech production (speech synthesis). This paper covers the details of how to develop a speech synthesizer using Festival tool. Two approaches have been discussed in details: Limited domain synthesis technique and Unit selection synthesis for Hindi. Apart from that how to configure Festival tool on Linux so that one can start working for a TTS also has been discussed. The purpose this paper is to give the full insights of technicalities involved while manipulating festival for a new language to the naive speech researchers.

References


Index Terms

Computer Science
Artificial Intelligence
Keywords
Speech synthesis; Prosody; Speech production; Linguistic module; Phonemic; Phonetic; F0; Pitch
Festival