Abstract

A Text To Speech synthesis (TTS) is the production of artificial speech by a machine for the given text as input. This field of study is known both as Speech Synthesis that is the "synthetic" (computer) generation of speech, and Text-To-Speech or TTS. It is the process of converting written text into speech. In the process of speech synthesis, mainly two processing components are used; they are NLP (natural language processing) and DSP (digital signal processing) modules. The speech synthesis has enormous applications such as reading for blind people, telecommunication services, language education, and aid to handicapped persons, talking books and toys, call center automation etc. The main aim of the project is to develop a TTS system producing a voice with Indian accent for the given input text. In this project, for the conversion of text to speech, we use Festival in Linux environment. Festival is a general pre-packaged tool for development of multi-language speech synthesis systems; and it will support most of the languages in the text to speech conversion. In this project, the speech generation process is done by using Festival framework and speech tools. The voice model is
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generated by using festvox frame work, festival and speech tools. The required speech data for generating voice is recorded in noise less environment. The voice models can be generated by unit selection or clustergen modules present in festvox. It is observed from the generated voices that clustergen voices are better than unit selection voices.

References

3. Paul Taylor, a text book on “Text to Speech Synthesis”, University of Cambridge, United Kingdom
9. Simon King, “A beginners' guide to statistical parametric speech synthesis” The Centre for Speech Technology Research, University of Edinburgh, UK
17. Sangramsing Kayte, Monica Mundada, Santosh Gaikwad, Bharti Gawali "PERFORMANCE EVALUATION OF SPEECH SYNTHESIS TECHNIQUES FOR ENGLISH
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LANGUAGE " International Congress on Information and Communication Technology 9-10 October, 2015


19. Monica Mundada, Sangramsing Kayte “Classification of speech and its related fluency disorders Using KNN” ISSN2231-0096 Volume-4 Number-3 Sept 2014

20. Monica Mundada, Bharti Gawali, Sangramsing Kayte "Recognition and classification of speech and its related fluency disorders" International Journal of Computer Science and Information Technologies (IJCSIT)

25. http://hts.sp.nitech.ac.jp/

Index Terms

Computer Science

Pattern Recognition

Keywords

TTS, Festival, Festvox, speech syntheses.