Abstract

Building a speech recognition system for Indian languages is an open question and requires focus. This paper highlights on a new model for speech recognition system and uses syllable as the basic unit. This model has five phases, the first three phases focused on training the data and building Trie structure to reduce the time and space and the last two phases are for testing. Training includes, first phase for syllable extraction from text and speech and annotating data sets. Second phase focuses on building the three state model for each syllable unit and third phase, for building Trie structure using morph knowledge of Telugu language. Testing includes the fourth and fifth phase. Fourth phase is to mark the rough boundary of the syllable using the intensity of the signal and these sequence of syllables are recognized during fifth phase. The experiment is conducted on CIIL Telugu corpus and achieved good results in recognizing the words that were not used for training. For training we have used 300 words and for testing we recorded 100 new words and 80% of the words were recognized.

References

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Index Terms

Computer Science
Signal Processing

Keywords
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