Abstract

Speech recognition being an upcoming field is evaluated and research is being done for the same. Research in speech recognition for different languages is at peak. Less amount of work has been done for Indian languages particularly for Punjabi language. In this paper, Punjabi speech has been analyzed by extracting various features along with different temporal derivatives using feature extraction techniques. The dataset which has been considered for the research work is the set of Punjabi isolated digit recorded as 24 bit 44100 Hz mono PCM signal. Comparison of range and accuracy for acceptable results has been determined using HMM.

References

- X. Huang, J. Baker and R Reddy, "A Historical Perspective of Speech
Analysis of Various Features using Different Temporal Derivatives from Speech Signals

- A Kumar, M Dua and T Chaudhary, "Continuous Hindi Speech Recognition using Monophone based Acoustic Modeling", International Journal of Computer Applications,
Analysis of Various Features using Different Temporal Derivatives from Speech Signals

2014.

- S Young, "The HTK Book", Cambridge University Engineering Department.

**Index Terms**

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**Keywords**

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