\*\* Tile\*\*\*

Author1, Author2…

Designation

Department of xxx

Institute name, Address

Email ID

ABSTRACT

Convolution Neural Network (CNN) is used to show the out performance of the fully connected Deep Neural Network (DNN) within the hybrid Markov Model (HMM). In this paper we discuss in detail about the CNN architecture, full and limited weight sharing, convolution along time and frequency axes and stacking of several convolution layer. Later we discussed about the soft-max pooling layer through which we can learn about the size in the pooling layer. And then, by using convolution version of RBM we can explore the effect of the CNN pretraining. CNN architecture has extracted the basic form of the DNN for both phone recognition and speech recognition tasks. In comparison with full weight sharing architecture, limited weight sharing architecture is more predominant. Here, we all deal with single distant microphone and multiple distant microphones which are used for large vocabulary distant speech recognition. In MDM, we pass a beam formed signal as an input representation and compare the input with parallel input of the CNN. Here also we give significant role for the WER (word error rate).The WER of conventional DNN and GMM baseline with CNN and thus it gives the best accuracy. At last, CNN pertaining produces notable results on large vocabulary speech recognition tasks.

**Keywords:** CNN, MDM, SDM, Soft-max pooling layer, DNN.