1. INTRODUCTION:

Speech is the act of communication and expression of thoughts and feelings by spoken words. It is the most natural way to express ourselves. In today's era, emojis have become common in text messages because text messages could be misunderstood, and we would like to pass our emotions along with text as we do in speech.So, emotions help us to understand each other better.

Emotions are simply a class of feelings. Research has revealed the powerful role that emotions play in shaping human social interaction. The emotional detection is easy for humans but it is very difficult for machines. Therefore, the purpose of emotion recognition system is to use emotion related knowledge in such a way that human-machine communication will be improved. Emotion expression depends on the speaker and his or her culture and environment. As the culture and environment gets change, the speaking style also gets change. There are different types of emotions, depending on the way we interact or have an influence on any situation- ***happiness, anger, fear, surprise, sadness, disgust,*** etc.

We already use speech recognition in our everyday life. Speech Emotion Recognition (SER) could be used to detect our emotions as well. This area has received increasing research interest all through current years. SER is a technology that extract emotional feature from speech signal. It is generally composed of three parts- speech signal acquisition, feature extraction, and emotion recognition. The different classifiers available are: k-nearest neighbors (KNN), Hidden Markov Model (HMM) and Support Vector Machine (SVM), Artificial Neural Network (ANN), Gaussian Mixtures Model (GMM).

Different applications of the speech emotion recognition system are: intelligent toys, lie detection, in the call centre conversations which is the most important application for the automated recognition of emotions from the speech, in car board system where information of the mental state of the driver may provide to the system to start his/her safety.



**Fig. 1**