SPEECH EMOTION RECOGNITION USING MACHINE LEARNING

A PROJECT REPORT

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In partial fulfillment for the award of the degree of "BACHELOR OF ENGINEERING"

In

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BONAFIDE CERTIFICATE

Certificate that this project report "SPEECH EMOTION RECOGNITION"

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ABSTRACT:

In Human Computer Interaction (HCI) area speech emotion recognition is one of the popular topic in the world. Many researchers are engaged in developing systems to recognize different emotions from human speech.

This is done to make HCI and human interface more effective and develop systems like humans. In this paper we have stated the basics of speech emotion recognition system and reviewed different feature extraction and classification technique for the system.

Features are classified as Elicited features, Prosodic features and Spectral features. Different classifying techniques are used to classify different emotions from human speech like Hidden Markov Model (HMM), Gaussian Mixtures Model (GMM), Support Vector Machine (SVM), Artificial Neural Network (ANN), K-nearest neighbor (KNN).

Performance of classifiers are also discussed shortly.

Different applications where speech emotion recognition systems are used are also discussed in last section of the paper.

Keywords— Emotion, Speech, Emotional Speech database, Elicited featues, HMM, GMM, SVM, ANN, KNN, Application

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