

PROJECT TITLE (20pt. bold)

PROJECT SYNOPSIS (14pt. bold)

Machine Intelligence

BACHELOR OF TECHNOLOGY- V Sem CSE
Department of Computer Science & Engineering

SUBMITTED BY

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Abstract and Scope (should not exceed 1 page)

TOPIC:
SPEECH EMOTION RECOGNITION

Problem statement:

The model should be able to identify the emotional aspects of the speech or the audio file that has been given as an input to it. The emotions would be predefined.

Abstract and project description:

From a machine learning perspective, speech emotion recognition is a classification problem where an input sample (audio) is classified into a few predefined emotions such as sadness, happiness, disgust, fear and anger.

It does the task of recognizing the emotional aspects of the speech irrespective of the semantic communication.

Here, we implementing various machine learning techniques to train the model to get the appropriate results.

This project is being implemented using deep

learning techniques(Convulational neural network) and feature extraction.

Feature extraction is used to input the various audio files and convert them into the suitable form(vector or numeric format) for the training of the model.

The audio input is fed to CNN after it has been converted into the suitable format.

CNN(Convulational neural network is used to train the model)

Feasibility Study: (should not exceed 10 lines)

Applications of Speech Emotion Recognition:

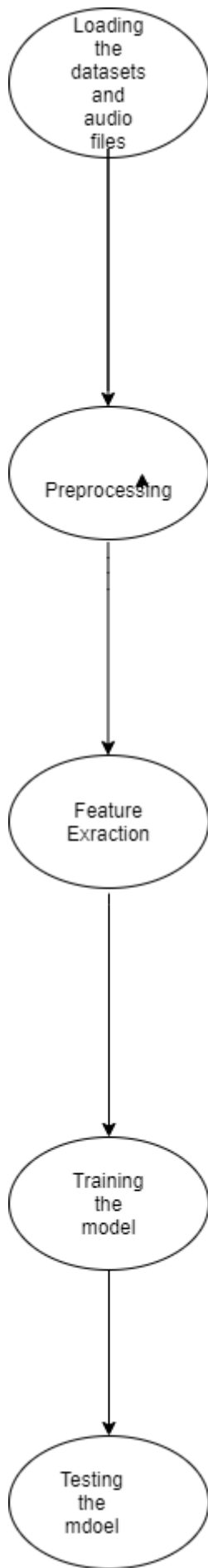
1.Education: A course system of distance education can detect bored users and change the course material.

2. Another upcoming use is to evaluate candidates applying for managerial positions by analyzing their responses during audio or video interviews.

3. On the other hand, SER can help evaluate the performance of existing employees – especially in the call-center industry where an improper conversation with a customer can be disastrous for the company's image.

4.It can be used to help people suffering from autism who can carry portable devices implementing this particular functionality.

Design Approach/ Methodology/ Planning of work (should not exceed 1 page)



References (small description of the journal/research paper you have used as reference)

1. s. Cao et al.[1] –he proposed a ranking SVM method for synthesize information about emotion recognition to solve the problem of binary classification.
2. Chen et al.[2] aimed to improve speech emotion recognition in speaker independent with 3 level speech emotion recognition method.