Speech Emotion Recognition using Machine Learning

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Abstract*: This research paper presents a Speech Emotion Recognition (SER) system utilizing a Multilayer Perceptron (MLP) classifier and real-time audio analysis. The system records audio samples, extracts relevant features, and employs machine learning techniques to predict emotions in spoken language. The study focuses on the development of an intuitive Graphical User Interface (GUI) using the Kivy framework, providing a user-friendly platform for real-time emotion analysis. In shortly In this project, we attempt to detect underlying emotions such as (sad, happy, neutral, angry, disgust, surprised, fearful and calm) in recorded speech by analysing the acoustic features of the audio data of recordings and Created an application to implement the same on user input.*

Keywords: python, python libraries, emotion recognition, Ravdess dataset, kivy framework for python