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Speech Emotion Recognition using Machine Learning With Real-time Audio Analysis

Prof. Sharda Dabhekar¹, Shivam K. Yadao², Tanay R. Tiwari³, Pranjal Zode⁴, Shubham B. Vaidya⁵

Guide, Department of Computer Science Engineering¹

Students, Department of Computer Science Engineering²

Rajiv Gandhi College of Engineering Research and Technology, Chandrapur, Maharashtra, India

shivamyadao284@gmail.com, tanaytiwari21@gmail.com,

pranjalzode007@gmail.com, shubhamvaidya599@gmail.com

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

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