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Speech Emotion Recognition Using Classifiers and XGBoost Algorithm

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Abstract: Communication is the key to specific one's thoughts and ideas clearly. The time of Machine Learning(ML) is rapidly advancing in bringing more intelligent systems available for everyday use. Intelligent applications are interactive and need minimum user effort to function, and mostly function on voice-based input. A speech percept can reveal information about the speaker including gender, age, language, and emotion. Several existing speech recognition systems employed in ML are integrated with an emotion detection system in order to investigate the spirit of the speaker. The performance of the emotion detection system can greatly influence the performance in many ways and might provide many advantages over the functionalities of those applications. During this proposed project, we perform speech data analysis on speaker discriminated speech signals to detect the emotions of the individual speakers involved within the conversation. We are analyzing different techniques to perform speaker discrimination and speech analysis to seek out efficient algorithms to perform this task.

Keywords: XGBoost Algorithm

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