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Emotion Recognition and Analysis from Speech

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Abstract: This paper presents a novel approach for emotion recognition and analysis from speech using convolutional neural networks (CNNs). The proposed system involves deriving the characteristics from the audio signals using Mel Frequency Cepstral Coefficient (MFCC) and Spectrogram based representation. These extracted features will be fed into the CNN model which will be trained to classify the different input speech signals into different emotion classes. The results demonstrate the effectiveness of the proposed system in emotion analysis and recognition from speech using CNN.

Keywords: Deep learning, convolutional neural network algorithm, Mel Frequency Cepstral Coefficient, Spectrogram, Human-Human Interaction(HHI), Human-Robot Interaction(HRI).

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