Abstract

Speech is one of the most promising model through which various human emotions such as happiness, anger, sadness, normal state can be determined, apart from facial expressions. Researchers have proved that acoustic parameters of a speech signal such as energy, pitch, Mel frequency Cepstral Coefficient (MFCC) are vital in determining the emotion state of a person. There is an increasing need for a new Feature selection method, to increase the processing rate and recognition accuracy of the classifier, by selecting the discriminative features. This study investigates the use of PSO integrated with mRMR (Particle Swarm Optimization integrated with Minimal-Redundancy and Maximal-Relevance) technique to extract the optimal feature set of the speech vector, thus making the whole process efficient for the GMM.

References

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