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The Combination of the Mel Frequency Cepstral Coefficients, Perceptual Linear Prediction, Jitter and Shimmer Coefficients for the Improvement of Automatic Recognition System for Dysarthric Speech

Authors : Brahim Fares Zaidi

Abstract : Our work aims to improve our Automatic Recognition System for Dysarthria Speech based on the Hidden Models of Markov and the Hidden Markov Model Toolkit to help people who are sick. With pronunciation problems, we applied two techniques of speech parameterization based on Mel Frequency Cepstral Coefficients and Perceptual Linear Prediction and concatenated them with JITTER and SHIMMER coefficients in order to increase the recognition rate of a dysarthria speech. For our tests, we used the NEMOURS database that represents speakers with dysarthria and normal speakers.

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