Discrimination of People with Parkinson (PWP) Disease on the basis of Voice Parameter Analysis

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Abstract

Voice is the essential medium of man’s communication in social as well as professional interactions. The human voice also reflects the state of health in many medical conditions which leads voice alterations in patients. This paper presents a voice analysis approach for discriminating the People With Parkinson (PWP) on the basis of extracted voice parameters. Voice analysis basically deals with decomposition of voice signal into voice parameters for processing the resulted features in desirable application. The features that are extracted in this paper are: frequency, pitch, voice intensity, formant, speech rate and pulse functions like Jitter (local), Jitter (local, absolute), Jitter (rap), Jitter (ppq5), Jitter (ddp), Shimmer (local), Shimmer (local, dB), Shimmer (apq3), Shimmer (apq5), Shimmer (apq11), Shimmer (dda) and Harmonic coefficients.

References

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Index Terms

Computer Science  
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**Keywords**
- Voice analysis technique
- PWP
- prosody features
- voice dysphonia
- voice parameters
- Hypokinetic dysarthria