Detection of Brain Diseases using EEG and Speech Signal

Abstract

Parkinson’s disease (PD) and Alzheimer’s diseases are the most common brain diseases. Parkinson’s disease (PD) occurs when the neurons that produce dopamine in the brain are damaged. People aged 50 or above mostly suffer from Parkinson’s disease. PD and Alzheimer’s disease can be diagnosed by many different signals such as EEG and Speech signals. This paper proposes a method for detecting PD and Alzheimer’s disease where, discrete wavelet transform feature extraction technique were used and SVM network is used for classification. The accuracy of 91.6% is obtained.

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Index Terms

Computer Science  
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Keywords

Parkinson's disease, Alzheimer disease, EEG signals, speech, SVM