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## Abstract

In the field of medical science, one of the major ongoing researches is the diagnosis of the abnormalities in brain. The Electroencephalogram (EEG) is a tool for measuring the brain activity which reflects the condition of the brain. EEG is very effective tool for understanding the complex behaviour of the brain. The aim of this study is to classify the EEG signal as normal or abnormal. It is proposed to develop an automated system for the classification of brain abnormalities. The proposed system includes pre-processing, feature extraction, feature

selection and classification. In pre-processing the noises are removed. The discrete wavelet transform is used to decompose the EEG signal into sub-band signals. The feature extraction methods are used to extract the time domain and frequency domain features of the EEG signal.

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## Index Terms

Computer Science

Signal Processing

### **Keywords**

Electroencephalogram   Brain Diseases   Wavelet Transform   Eeg Waves   Feature  
Extraction