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RICORDA

An early identification system to diagnose Alzheimer's disease

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Abstract

The need of controlling dementia has been given importance in recent years as the number of people who are affected with this disease are rapidly growing. Alzheimer's disease is one of the neurodegenerative disorder which has three main stages such as mild (MCI), moderate and severe. Unfortunately the cure for this disease has not been found yet.

Thus, many researches have been carried out using different algorithms such as SVM, FFT and brain imaging techniques such as FMRI, EEG to delay and control this disease. Even though many researches are being developed, the accuracy and the flexibility of the approach still lacks. Also most of the researches remains as theory and not launched for the patients and doctors directly.

Thus, the main aim of this project is to construct an approach to detect the level of Alzheimer's disease in advance using EEG in an efficient and more accurate method which can be used by doctors and patients to identify the level of Alzheimer's disease.

Keywords:

Alzheimer's disease

Support Vector Machine

Random forest

Decision tree

Wavelet transform