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(57) Abstract :

A method and system (100) of early detection of multiple sclerosis (MS) using Arti-ficial Neural Networks (ANN) conjugated with electroencephalography (EEG) is provided. The method includes capturing EEG data (103) from healthy and MS af-fected individuals, by recording electrical activity of a human brain. The method further includes developing and training a plurality of ANN models using a plurality of input parameters including EEG data (103), demographic factors, and physiologi-cal data, for performing a comprehensive analysis of brain activity by combining EEG data (103) and machine learning. The method further includes performing analysis of the brain activity for early detection of multiple sclerosis by using the ANN models for detecting presence of MS and progress of MS, in individuals. The system includes a memory (102) for storing EEG data (103) from healthy and MS affected individuals and a processor (104) coupled to memory (102) and configured to execute a MS detection and analysis component (106). [FIG.6]

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