

STRESS LEVEL RECOGNITION USING ELECTROENCEPHALOGRAM (EEG) SIGNAL

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Abstract

Mental stress is a key factor to a wide range of health problems. Stress has the potential to affect people's work performance; it not only causes discomfort, but it may also lead to other issues. Aim of this project will develop a system that can identify people's stress levels in real time using EEG signals, with the goal of giving more accurate and quicker machine learning solutions with less human input. To identify the stress level from EEG signal. To develop the models to identify the stress level from EEG signal Realtime and compare the most accurate model. Agile methodology was chosen to develop the system because Agile methodology promotes continuous iteration of development and testing throughout the software development lifecycle and best choice to fit all the rapidly changing requirements. To build models for training, author has used Machine Learning tech techniques and seep learning techniques. Feedforward Neural Network model gives a higher accuracy than SVM model. This concludes research with a contribution which possibly has a huge impact towards stress level recognizing.

Keywords: Machine Learning, Feedforward Neural Network, Deep Learning, Supprot Vector Machine