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(57) Abstract :

The process of prediction of stress level based on physiological parameters: Electroencephalograph (EEG), Blood Pressure (BP) and Heart Rate (HR) and psychological parameters: Perceived Stress Scale (PSS), in an individual is the invention mentioned here. The data of the parameters EEG, BP, HR, PSS are preprocessed and are validated using Two way ANOVA without replication. Further the data is input to the ensemble of machine learning algorithms involving Support Vector Machine (SVM), Random Forest (RF) and K-Nearest Neighbor (KNN) to efficiently predict the degree of stress and classification of stress level into less stressed, moderately stressed or highly stressed is done. Further the findings can be used to advise a specific technique of heartfulness meditation to reduce stress. The anticipation accuracy is good. The invention of this process is extremely beneficial to help individuals predict stress beforehand and use the relaxation techniques to avoid stress.

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