

Literature Survey:

Sr. No	Title of Paper	Name of Authors	Published Year	Remarks
1.	Automatic Stress Detection Using Wearable Sensors and Machine Learning: A Review	1.Shruti Gedam 2.Sanchita Paul	2020	<ul style="list-style-type: none"> ➤ In this paper, some previous approaches of automatic stress recognition systems who used sensors and machine learning are discussed in detail. In these, physiological data is extracted using some stressor tests on the people. ➤ Algorithms used:Support vector machine, Random forest and K-Nearest Neighbor ➤ The limitation of this study is many researchers used multiple features correlated with each other which results in increased computation time. Also some of them used costly commercial devices for physiological signal collection where low-cost sensors can be used.
2.	Machine Learning and IoT for Prediction and Detection of Stress	Mr.Purnendu Shekhar Pandey	2017	<ul style="list-style-type: none"> ➤ To detect the stress beforehand they have used heart beat rate as one of the parameters. Internet of Things (IoT) along with Machine Learning (ML) is used to alarm the situation when the person is in real risk. ML is used to predict the condition of the patient and IoT is used to communicate the patience about his/her acute stress condition ➤ Algorithms used: Logistic Regression,SVM,Naive Bayes,VF - 15.

3.	Stress detection using deep neural networks	1.Russell Li 2.Zhandong Liu	2020	<p>➤ In this paper they have developed two deep neural networks: a 1-dimensional (1D) convolutional neural network and a multilayer perceptron neural network. Deep neural networks do not require hand-crafted features but instead extract features from raw data through the layers of the neural networks. The deep neural networks analyzed physiological data collected from chest-worn and wrist-worn sensors to perform two tasks.</p> <p>➤ Results: The deep convolutional neural network achieved 99.80% and 99.55% accuracy rates for binary and 3-class classification, respectively.</p>
4.	A Decision Tree Optimised SVM Model for Stress Detection using Biosignals	1. Alana Paul Cruz 2. Aravind Pradeep 3. Kavali Riya Sivasankar 4. Krishnaveni K.S	2020	<p>➤ In this paper they have proposed a machine learning model based on human bio signals to detect human stress. They have selected ECG as the bio signal and extracted its features. The advantage of taking ECG as the bio signal is, information about respiratory signals - EDR (ECG Derived Respiration) feature can be easily derived without any extra sensors. For training and validation of our new model they used Physionet's "drivedb" database.</p> <p>➤ Algorithms used: SVM</p>