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	Shruti Gedam, Sanchita Paul.	2020	In this paper, there are various stress detection approaches who uses low-cost wearable sensors for data collection and machine learning algorithms for predicting stress level of an individual. Approaches: Stress Detection using Wearable Sensors and IOT Devices, Stress Detection through Physiological Signals, Stress Detection Using Microblogs, Stress Detection Using Videos.
2.	Machine Learning and IoT for Prediction and Detection of Stress	Purnendu Shekhar Pandey	2017	To detect the stress beforehand we 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.
3.	A Decision Tree Optimised SVM Model for Stress Detection using Biosignals	Alana Paul Cruz, Aravind Pradeep, Kavali Riya Sivasankar and Krishnaveni K.S	2020	In our work we propose a machine learning model based on human bio signals to detect human stress. In our work we 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. Among those unique features we chose ECG derived Respiration, Respiration Rate, QT interval. For training and validation of our new model we used Physionet's "drivedb" database. Our proposed model uses Optimised Support Vector Machines (SVM) using decision trees.
4.	Stress Detection with Machine Learning and Deep Learning using Multimodal Physiological Data	Pramod Bobade, Vani M.	2020	This paper proposes different machine learning and deep learning techniques for stress detection on individuals using multimodal dataset recorded from wearable physiological and motion sensors, which can prevent a person from various stressrelated health problems. Data of sensor modalities like threeaxis acceleration (ACC), electrocardiogram (ECG), blood volume pulse (BVP), body temperature (TEMP), respiration (RESP), electromyogram (EMG) and electrodermal activity (EDA) are for three physiological conditions - amusement, neutral and stress states, are taken from WESAD dataset.
5.	Stress detection using deep neural networks	Russell Li and Zhandong Liu	2020	To address this deficiency, we 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. We

				demonstrated the potential of deep neural networks for developing robust, continuous, and noninvasive methods for stress detection and emotion classification, with the end goal of improving the quality of life. Keywords: Convolutional neural network, Emotion classification, Multilayer perceptron, Stress detection.