

Literature survey:

S.No: 1

Project title:

Stress detection with ML and Deep Learning using multimodal physiological Data.

Authors:

- Pramod Babode
- Vani M

Published Year: 2020

Remarks:

- Algorithms:

K-Nearest neighbor, Linear discriminant analysis, Random Forest, Decision Tree, Adaboost and kernel support vector Machine.

- Methodology:

WESAD dataset is used for this. This dataset is the collection of motion data and physiological features of 15 subjects.

- Advantages:

- Accuracy has reached upto 81.65% and 93.20%.
- The kernel SVM has achieved the best Performance.

- Disadvantages:

- The decision tree had the worst performance among others.

S.No: 2

Project title:

A decision Tree optimized SVM model for stress detection using Biosignals.

Authors:

- Alna Paul cruz
- Pradeep
- Kavali Riya Sivasankar
- Krishnaveni KS

Published Year: 2020

Remarks:

- Algorithms:
Support vector Machine (SVM)
Decision Tree
- Methodology:
The dataset was collected from automobile drivers dataset.
 - The dataset was trained with SVM models like Linear, quadratic, cubic with default kernel function.
 - During the process Electrocardiogram(ECG) and electromyogram(EMG) was recorded in two different environments.
 - After this a matrix is constructed using
 - True positive
 - True negative
 - False negative
 - False positive terms
- Advantages:

Better performance.

S.No: 3

Project title:

Automatic stress detection using wearable sensors and Machine Learning.

Authors:

- Shruthi Gedam
- Sanchitha paul

Published Year: 2020

Remarks:

- Equipment Used:

- Electrocardiogram(ECG)
- Electroencephalography(EEG)
- Photoplethysmography(PPG)
- Microblogs

- methodologies and Approaches:

- Stress detection using videos
- stress detection in working environment
- stress detection in academics
- stress detection while driving
- stress detection in firefighters

S.No: 4

Project title:

Machine Learning and IOT for prediction and detection of stress.

Author:

MR. Purnedu shekhar Pandey.

Published Year: 2017

Remarks:

- Methodology:

A developed prototype detects whether a person is in stress using variability in his/her heart rate.

- Equipment Used:

- Node MCU
- Pulsar sensor

- Algorithms:

- Logistic regression (Supervised Learning)
- Support Vector Machine.