An Enhanced Feature Extraction Method and Classification Method of EEG Signals using Artificial Intelligence

International Journal of Computer Applications
Foundation of Computer Science (FCS), NY, USA

Volume 126
Number 10

Year of Publication: 2015

Authors:
Shilpa Bharti, Sukhman Preet Singh

10.5120/ijca2015906200
{bibtex}2015906200.bib{/bibtex}

Abstract

Emotion Recognition from EEG signs permits the immediate appraisal of the "internal" condition of a client, which is viewed as an essential figure human-machine-connection. Numerous systems for feature extraction have been mulled over. Their suitability for emotion recognition, be that as it may, has been tried utilizing a little measure of particular capabilities and on distinctive, typically little information sets. In the proposed work NN based Classification will be done on EEG Signal dataset that has been collected from FORTIS HOSPITAL AND BCI Competition. First feature extraction was applied to the raw data. Then the resulted feature vectors were used to train the classifiers. At last the classifiers were tested with the data not seen during the training to evaluate their classification accuracy. The results indicate that the NN classifier produces best classification accuracy than genetic algorithm.

References

An Enhanced Feature Extraction Method and Classification Method of EEG Signals using Artificial Intelligence

Index Terms

Computer Science

Signal Processing

Keywords

Emotion Recognition, EEG Signal, Feature Extraction, Classification, Neural network, BCI, FAR, FRR