Abstract

Alcoholic beverages are widely used in many societies. People can maintain their everyday lives while using a certain amount of alcohol. However, when alcohol is used intensively, it prevents healthy thinking, undermines decision making and reflex functions. This decrease in reflexes brings increase in traffic and job accidents. In order to determine the capability of a person to do a job, the detection of alcohol level is important. Nowadays, breathalyzers are used for the purpose of such detection. These devices measure the amount of alcohol rather than loss of function caused by alcohol. But the amount of alcohol taken show different effects from person to person. In this study people were tested and determined whether they were alcoholic with the help of EEG data. Preprocessing was performed on the EEG data set before the process of detection, followed by the training of ANN (Artificial Neural Network) and its test. Based on the obtained best performance value, an interface was designed on MATLAB for users.
The Classification of EEG Signals Recorded in Drunk and Non-Drunk People

- Figure of measuring EEG signals, http://bmm.etu.edu.tr/tr/content/biyoelektronik-sinyal-isleme, Last accessed 20.03.2012.
Symposium (IATS’11), pp. 51-54.

Index Terms

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Keywords

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