Informatics Institute of Technology

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Driver state detection based on EEG

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Abstract

Driving requires attention and fast decision making in real time at many situations. The most of the recent traffic accidents are caused due to distractions and lack of attention during driving. Most of the lack of attention occur due to stress and drowsiness. A mass amount of accidents occurred during driving could have been avoided if behaviours such as stress and drowsiness were detected and appropriate countermeasures are taken. The driver's state recognition system is a solution to monitor driver's EEG (Electroencephalography) and detect drowsiness. This system is mainly designed for mobile devices to detect driver's drowsiness in real time. If drowsiness was detected it will warn the driver by a high frequency sound.

Subject Descriptors:

      G.1.3 Numerical linear Algebra

      1.1.2: Algorithms

Key Words:

      EEG, Drowsiness, Alert

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