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Drive Care — System for Monitoring Driver's Concentration and Consciousness using Consumer Grade Electonnencephalogram (EEG) Headset

SILVER PRIZE AWARD

As people increasingly drive cars for both work and personal purposes, the dangers posed by drug driving, drink driving or sleep-deprived driving are growing threats to society. Highly dangerous driving behaviour and numerous traffic accidents occur because drivers are insufficiently conscious or inadequately focused while driving. This project introduces an EEG mobile application called 'DriveCare' that can greatly reduce these problems and help to ensure driving safety.

The DriveCare application helps individual drivers and organisations devoted to safe driving. The need for a new method to reduce traffic accidents is great. The proposed application works on smartphones, which almost everyone owns, and provides a system for monitoring the consciousness and concentration of drivers. The application is not just for individual use, but also provides a web online system for organisations to display their full data for collective management.

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銀獎

不論是為了工作還是個人需要，不少人都愛自行駕車，但藥後駕駛、醉酒駕駛、或駕駛前睡眠不足，往往容易對市民的安全構成威脅。司機無法保持清醒或專注地駕駛而導致高危駕駛行為或交通意外，屢見不鮮。「護駕」腦電波應用程式，將有助大幅減少這些問題，協助確保駕駛安全。

由於交通意外時有發生，社會急切需要尋找新方法減少交通事故，「護駕」應用程式正好能同時協助司機個人及機構共同促進駕駛安全。這款應用可安裝於智能手機，因此幾乎可以伴隨每一位司機左右，監察他們的清醒和專注程度。這款應用程式不但適用於司機個人，也為機構設置網絡線上系統，展示全面數據，供集體管理之用。

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