MOBILE-ORIENTED GAMIFICATION FOR DRIVER & ROAD SAFETY

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Abstract

The risk of increasing a road accident significantly increases if the driver makes a glance off the road to engage in a distracting task like looking at the mobile phone. In order to improve road safety, gamification elements could be incorporated to change the driver behavior to drive more carefully and attentively. In an effort to provide the solutions to the public, the existing systems need to be minimized into the palm of the hand of the user. This project demonstrates a mobile based gamification system which uses the user's iPhone to provide gamification while bearing no additional expense to the user. The proposed solution shows significant ease of accessibility of gamification solutions which is able to be targeted to increase the safety of both the road and for drivers.

Key Words:

Gamification, eye-tracking, face-tracking, mobile gamification

Abbreviations

Abbreviation	Definition
OBD	Onboard Diagnostics
CAN	Controller Area Network
IDE	Integrated Development Environment
GPS	Global Positioning System
OBD	On-Board Diagnostics
AR	Augmented Reality