### MAKERERE UNIVERSITY FACULTY OF COMPUTING AND INFORMATICS TECHNOLOGY

## DEPARTMENT OF COMPUTER SCIENCE BACHELOR OF SCIENCE IN COMPUTER SCIENCE BIT 2207 RESEARCH METHODOLOGY YEAR 2

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# SPEEDING DETECTOR ALONG ROADS TO CURB INCREASING ROAD TRAFFIC ACCIDENTS IN UGANDA IN VIEW OF TAXI DRIVERS

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#### 1 INTRODUCTION.

In this project our aim is to put up an automated system that will help to reduce road accidents and in this we are basically looking at accidents mainly caused by overspeeding, dosing off or sleeping while driving, use of telephones while driving and many others. The system shall contain an eye blink sensor and an ultrasonic sensor where the ultrasonic sensor will monitor vehicles or any other obstacles that are in front or behind the car at a distance not more than 5 meters. In this way when an obstacle is detected, the ultrasonic system will send signals to the embedded board of the car and after receiving the signals, sends the them to the car inbuilt system, the car speed is automatically reduced to reasonable speed or even stopped immediately. The eye blink sensor detects the eye blink of the driver in not more than 30 seconds eye closed and if no blink is recognized, an alarm is made and the vehicle is automatically stopped. The eye blink sensor will also monitor the position of the head and the eyes and if they are very unstable for example if the driver is moving his head from left to right randomly instead of focusing in the forward direction the an alarm will be made and the vehicle will automatically stop. This system shall also contain a system that monitors control of the vehicle that is brakes, steering and others such that if the driver loses control/fails to control the vehicle, a big alarm is made so that all those near are alerted and disappear immediately.