SMART TRAFFIC LIGHT

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A thesis submitted in partial fulfillment of the requirement for the award
of Bachelor Engineering (Hons) (Mechanical)

Faculty of Mechanical Engineering
Universiti Teknologi MARA (UiTM)

MAY 2010

"I declared that this thesis is the result of my own work except this ideas and summaries which I have clarified their sources. The thesis has not been accepted for any degree and is not concurrently submitted in candidature of ant degree."

Signed :...........................

Date:.....24 MAY 2010.....

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ACKNOWLEDGEMENT

Firstly, in the name of Allah, the most beneficent, the most gracious, and the most merciful, Alhamdulillah thanks to Allah almighty, Allah give me strength during do this Final Year Project report. Thank you so much to my supervisor, Mr. Mohd Asri Bin Mohd Nor, who had given me good advice and explanations. For him is very helpful person who had helping me to finish the task given as per required on time. He also do helps a lot in giving me tip's to perform my task as an "engineer" very well.

Not to forget here, I also would like to say thank you to all my friends, for they are very helpful and giving me full support and commitment in doing the task and also and being really creative in giving me such a brilliant idea to finish my job .I am very proud of them.

The purpose for doing this final year project report is to reveal to me more about communication skills, writing, creative thinking, tasking effectively and so on. As the result of these, it can help in improving my grades while I'm still doing my study in UiTM. Nevertheless, I am really hoping that this report will help a lot as for the references for the younger generation in the future.

Lastly, thank you very much.

ABSTRACT

A smart traffic light which is intelligent, environmental friendly, safe and can reduce the problems is designed. The smart traffic light is basically designed to overcome any trespassing or reckless during the red signal. The traffic light consist a sensor, electronic device and a single camera which is control by a program come from MATLAB software. The function of the camera is to trigger the video when the car passes through it in red condition. Whenever the traffic light turns to red, the sensor will be activating automatically. When the car pass through the traffic light, the sensor will be turn on and the camera will record the car motion in a video format. The video and audio is then saving in the hardisk. The video is converting to the Microsoft wave before it will be send to the authorities using email. The sending process will be done using an electronic device like a cell phone. The program is basically design to detect the car motion when they pass the camera. The camera will detect the actual frame and capture the video. If any frame changes occur the camera will detect it as a motion of a target. To make the traffic light effective the sound detector which is located in program is eliminated to make sure no sound trouble disturbing the system. Therefore the only motion of the unwanted car will be record as prove of gaffe. The program consists of a setting of camera and the instruction to trigger the video.

TABLE OF CONTENT

CONTENT	PAGES

CHAPTER I   INTRODUCTION