



University College Sedaya International

## *School of Engineering*

### **FINAL REPORT**

#### **FINAL YEAR ENGINEERING PROJECT (APRIL 2006)**

Course : B.Eng (Hons) Electrical & Electronics Engineering  
Title : Design of a Speed Detector System  
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Project Coordinator : DR. KHEDR M.M ABO HASSAN  
Duration : September 2005 to April 2006



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## **ABSTRACT**

The report elaborates on the background of the project, explains the researches undertaken, applications for developing the system and a complete documentation about the theories behind the technologies. The objective of this study is to design and develop a system which is capable of measuring the speed of metal moving objects (car) and detecting non-metal object (human). The study focus on accuracy, precision, stability and reliability of the system; in conjunction, the applications of sensors and their performances had been revised thoroughly. Three main detectors used in the system, they are metal detector, ultrasonic motion detector and Infrared motion detector. Two metal detectors and a single motion detector are interfaced to computer via parallel port. A software program allows user to monitor the system operation on the computer screen and it able to output certain signal in term of messages onto digital display board. The information obtained is stored in visual basic database and instantaneous report such as table and graph can be printed out. The estimation of time scales or Gantt chart is prepared to ensure the project make completed according to the schedule. References are included for easily accessible of information.