

SCHOOL OF ENGINEERING  
FINAL YEAR PROJECT  
FINAL REPORT

DESIGN OF A MOVING VEHICLE ROBOT

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## **ABSTRACT**

The objective of the present study is to design a moving vehicle robot. The moving vehicle robot can be used for exploration or rescue missions. The moving vehicle robot will eliminates the threats posed to the rescuers. The moving vehicle robot consists of eight rollers and can be able to move around with some degree of stability on the ground which full of different shape of rocks. The mobility of the moving vehicle robot is leads by four pairs of DC motors. The two servo motors fixed in the front arms of the moving vehicle robot is used to steer the movement of the moving vehicle robot. Another pair of servo motors fixed on the robot's body chassis will help the robot movement while retaining a high ground clearance. The Charged-Couple Device (CCD) camera fixed in front of the robot's body chassis is using to survey situation of the environment. Situation of environment will show on the PC monitor. The moving vehicle robot also equipped with ultrasonic sensors to enable the robot to navigate its way around or about obstacles to seek out the survivors.