

MAZE-SOLVING ROBOT

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ABSTRACT

This project describes a design and implementation of an autonomous robot. The design criteria for this project is for the robot to self navigate from a starting point to an ending point in a maze by using sensors to see the walls. The right hand rule allows the robot to follow the right wall until it gets out of the maze and it should be designed for collision-free navigation. Once the robot begins its task, it must operate without operator intervention. Therefore, the robot must be aware of its surroundings and orientation, capable of problem solving, have appropriate sensory apparatus, and a mechanism for “seeing” the target object. Tests and experiments are to be going to hopefully design the robot from crashing into obstacles like wall. By using a microprocessor, external driver circuit, and sensory system, the robot may be constructed in an efficient and cost effective manner. This robot is using the fundamental of robotics knowledge, so this is the very basic robot that can be implemented into many types of advanced robot. It has a wide reaching application, from bomb sniffing to finding humans in wreckage to home automation,