

AUTONOMOUS MAZE SOLVER ROBOT

ABSTRACT

Autonomous robots are intelligent machines that are capable of performing task in the world themselves with little or no human intervention. Maze solving problem is a very old problem, but still now it is considered as an important field of robotics. This field is based on decision-making algorithms. The main aim of this project is to make an Arduino based efficient autonomous maze solver robot. Two simple mazes solving algorithms “Wall following algorithm” and “LSRB” L stands for 'LEFT', S for 'STRAIGHT', R for RIGHT, and B for 'BACK' or BACKWARD” are used to make this robot. In this project Hardware development, software development and maze construction had been done. For performance testing, the robot will implement to solve the 16 x 16 maze. The capability of finding the shortest path is also verified.