Abstract

A key feature of an autonomous vehicle is the ability to get to a target location while traversing through a previously unknown environment. Mapping the environment will allow the vehicle to find an optimum path. This paper explores this issue by programming a mobile robot to find the shortest route in a reconfigurable maze. A wall follower algorithm with combined left-hand and right-hand rules is implemented upon several different maze configurations. It is found that the hybrid algorithm has improved the maze solving capabilities of the maze robot significantly.

References

Index Terms

Computer Science
Algorithms

Keywords
Reconfigurable maze path optimization micromouse wall follower.