Abstract

Simulation algorithms like random walk and standard walk can be used to simulate the working of a cleaner robot assigned a task of cleaning the room. This paper represents a way to simulate and conclude which model would be best suited for a robot to clean a room efficiently. The algorithms implemented represent a stochastic simulations which results in random behavior, causing the results to fluctuate over many iterations, however after an analysis of large number of such test cases and statistical data, a conclusion can be made as to which model would best serve the purpose. The end result is a model that when applied to the robot with the given task would perform it effectively and quickly in the least possible time and any given condition.

References

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Index Terms

Computer Science
Automated Systems

Keywords

Simulation RandomWalk StandardWalk Cleaner Robot Stochastic