Abstract

With the need of traversing a specified path in shortest time increases the demand of optimizing the route traversed. This optimization involves path or trajectory planning along with the implementation of an optimization algorithm. Several Swarm Intelligence techniques have been applied to solve the optimization problems. In this paper, we discuss the optimization achieved with the usage of one of the Swarm Intelligence algorithms namely, Artificial Bee colony Optimization. Implementation of Artificial Bee Colony Optimization helps in finding the shortest, collision-free path from a specified starting point to the predetermined destination or goal point with consideration to static or dynamic obstacles.

References


Index Terms

Computer Science

Artificial Intelligence
Keywords
Path Planning  Swarm Intelligence  Artificial Bee Colony Optimization  Static and Dynamic Obstacles
Obstacle Detection
Obstacle Avoidance