Homework of Motion Planning for Mobile Robots

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Abstract

matlab implementation of RRT algorithm。

Keywords: RRT, MATLAB

1. About RRT

Rapidly exploring random tree(RRT) Start from the starting point, randomly sample in space, and find the point on the path tree that is closest to the sampling point and can be connected to it without obstacles, connect this point with the sampling point, and add the sampling point to the path tree until the area near the end point is Explored. This method cannot guarantee that the path obtained is optimal.

2. Result of simulation
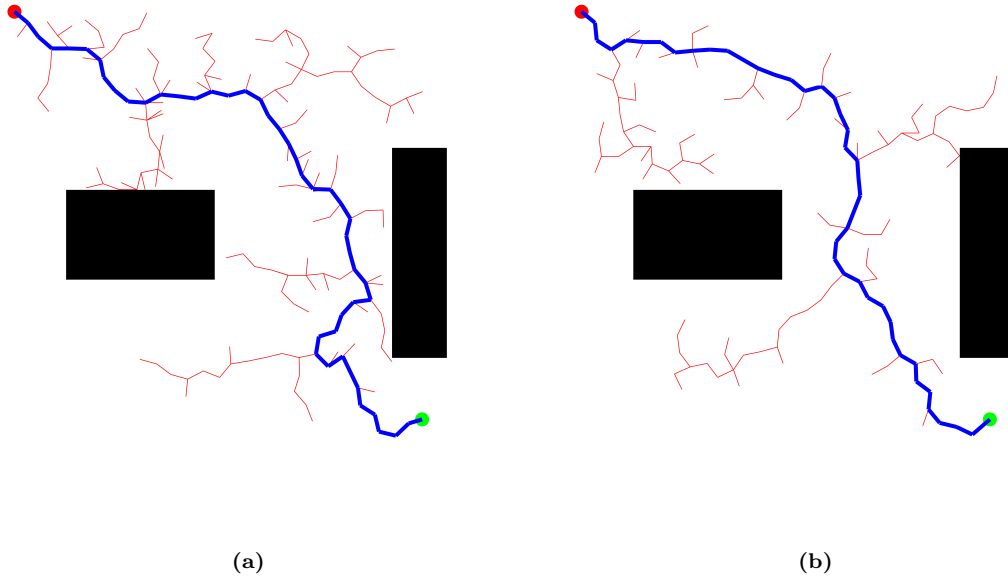
Run the RRT.m file, and we have the fellowing result:

(a)   (b)

Figure 1: path

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