

ARO Homework 6: RRT Planning in 2D Occupancy Grid

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Implement the RRT algorithm and find a collision-free piece-wise linear path in the 2D occupancy grid for the TurtleBot. The TurtleBot has diameter 40cm, it can move along the line in a specified direction. Size of occupancy grid bins is 20×20 cm. Each bin contains either class 1 (occupied) or class 0 (unoccupied). Path starts in the bottom-left corner and ends in the upper-right corner of the occupancy grid.