Linefollowing

Build a robot that can follow a narrow black line on white paper.

1) Robots must be autonomous.

2) The line will be black electrical tape (3/4 inch) on white butcher paper.

3) The path will be unknown to contestants prior to the event.

4) The lighting situation is unknown, but attempts will be made to reduce significant environmental light. (It is recommended that your robot use shielded light sensors. It is also recommended that a variable is used to calculate a dark value at the beginning of your robot's program.)

5) A robot gets two trials

6) The timer will begin the trial by saying, "On your mark, get set, go."

7) The timer will stop the time when any part of the robot reaches the end of the line.

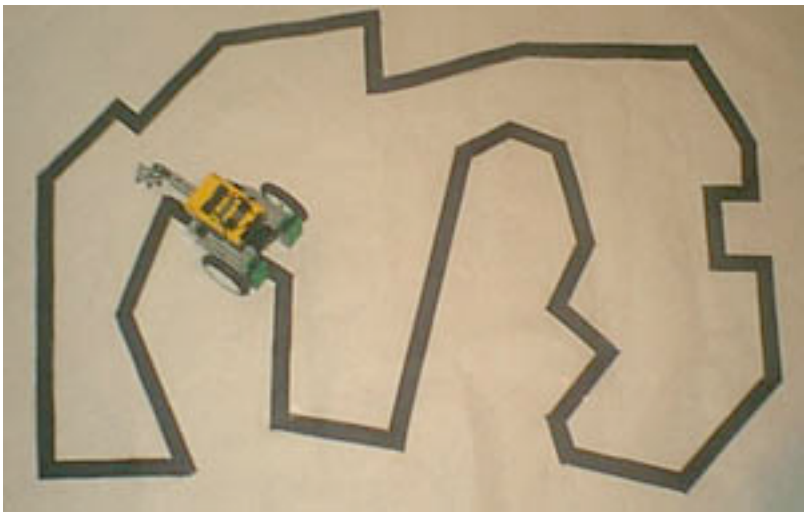
8) A judge may stop the trial if it does not appear that the robot will finish the task.

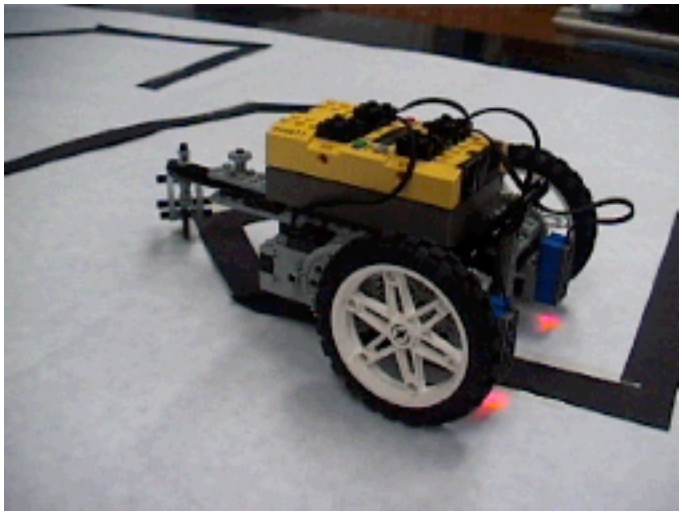
9) A robot not finishing the task will not receive a time score for that trial.

10) A robot reaching the end without following the line a significant part of the time will not receive a time score. (this is a robot that appears to reach the end by accident, rather than following the line)

10) The path will be made without overlapping lines. It will be a clear unbroken line, with curves, sharp turns, and straight portions. Lines will not pass within 6 inches of another line.

11) Ranking is determined by the shortest time taken





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