

Moving Straight: Close Shave Challenge

Moving Straight Challenge

In this challenge, you must drive your robot as close as possible to a LEGO minifig without knocking the minifig over. The minifig will be placed at one of three locations, with the specific spot determined by a coin toss.

Rules and Procedure

1. Load any programs you intend to use onto the NXT. Remember that you can load more than one onto the NXT at a time, and choose which one to run later.
2. Start the robot behind the black line (no parts overhanging).
3. Place the minifig 1 floor tile away from the line, or 30 cm if your floor does not have tiles.
4. Flip two coins.
5. For each “heads” result, move the minifig back one tile (or additional 30 cm increment).
6. Choose a program from the ones you have prepared, and run it.
7. Calculate your score:
 - Start with 100 points.
 - Add 5 bonus points for difficulty for each “heads” you got in the coin toss.
 - Measure the distance from the closest piece on the FRONT of your robot to the FRONT of the minifig’s chest (you can determine which is the front of your robot).
 - Subtract 5 points for every 0.1 cm of distance between the minifig and the robot.
 - Earn a score over 80 points to beat the challenge!

