

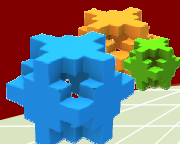
2007 CSE Robotics Competitions and Rules



Dr. Yinong Chen
Mr. Calvin Cheng



Judge and Referees



Judge
Dr. Yinong Chen



Referee
Sara Watts



Referee
Angela
Zadorozny

Games to Play

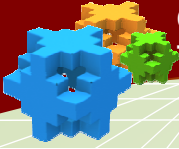
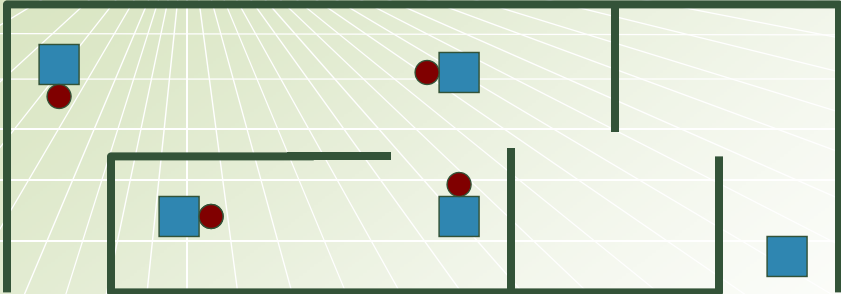


- 1 Traversing the Maze with Computer Control
- 2 Traversing the Maze with Artificial Intelligence
- 3 Team Game: Ball Collection


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CSE Robotics Competition

Game 1 Traversing a Maze with Computer Control

The places will be decided by the time used. The shorter the better.
If a robot does not complete in **THREE** minutes, the game is over and the time is **FOUR** minutes



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CSE Robotics Competition

Game 2: Traversing a Maze with Artificial Intelligence

The maze is a 2x7 grid of cells. The top row is numbered 7 to 1 from left to right. The bottom row is numbered 8 to 1 from left to right. The cells in the bottom row are numbered 4, 4, 4, and 1 from left to right. A blue square is located in the bottom-right cell (row 2, column 1). The maze walls are represented by thick black lines. Vertical walls are between columns 1-2, 2-3, 3-4, 4-5, and 5-6. Horizontal walls are between rows 1-2 in columns 3, 4, and 5. A small blue square is in the bottom-right cell.

How to win:
 The number of points to be awarded to a robot is determined by the number on the map at which the robots stops. The time allowed is THREE minutes

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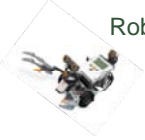


Game 3: Ball Collection Match 1

The diagram shows four robots arranged around a central vertical line of seven red balls. Robot 1 and Robot 2 are on the left side, and Robot 3 and Robot 4 are on the right side. The robots are depicted as small black and white figures with sensors.

At the end of FIVE minutes:
 Each robot with more balls on its side wins four points
 Each robot with fewer balls on its side wins two points

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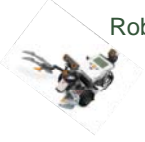

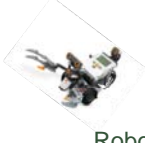
Game 3: Ball Collection Match 2

 Robot 5		 Robot 7
 Robot 6		 Robot 8

At the end of FIVE minutes:
Each robot with more balls on its side wins four points
Each robot with fewer balls on its side wins two points

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Game 3: Ball Collection Match 3

 Robot 2		 Robot 1
 Robot 8		 Robot 7

At the end of FIVE minutes:
Each robot with more balls on its side wins four points
Each robot with fewer balls on its side wins two points

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Game 3: Ball Collection Match 4

**At the end of FIVE minutes:
Each robot with more balls on its side wins four points
Each robot with fewer balls on its side wins two points**

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Points Awarded to Each Game

Game 1

Place	1st	2nd	3rd	4th	5th	6th	7th	8th
Points	8	7	6	5	4	3	2	1

Game 2

Area	8	7	6	5	4	3	2	1
Points	8	7	6	5	4	3	2	1

Game 3

Results	Win a match	Tie a match	Lose a match
Points	4	3	2

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Scoreboard

	Game 1 points	Game 2 points	Game 3 match 1 points	Game 3 match 2 points	Game 3 match 3 points	Game 3 match 4 points	Total points
Robot 1							
Robot 2							
Robot 3							
Robot 4							
Robot 5							
Robot 6							
Robot 7							
Robot 8							

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The Winners are ...

	Game 1 points	Game 2 points	Game 3 match 1 points	Game 3 match 2 points	Game 3 match 3 points	Game 3 match 4 points	Total points
Robot 1							
Robot 2							
Robot 3							
Robot 4							

The final place of each robot will be determined by the total number of points in all three games

If a tie in points occurs, the robots involved will play an additional ball collection game with 3 balls in ONE minute

The judge makes the final interpretation of the rules and can override the rules!



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