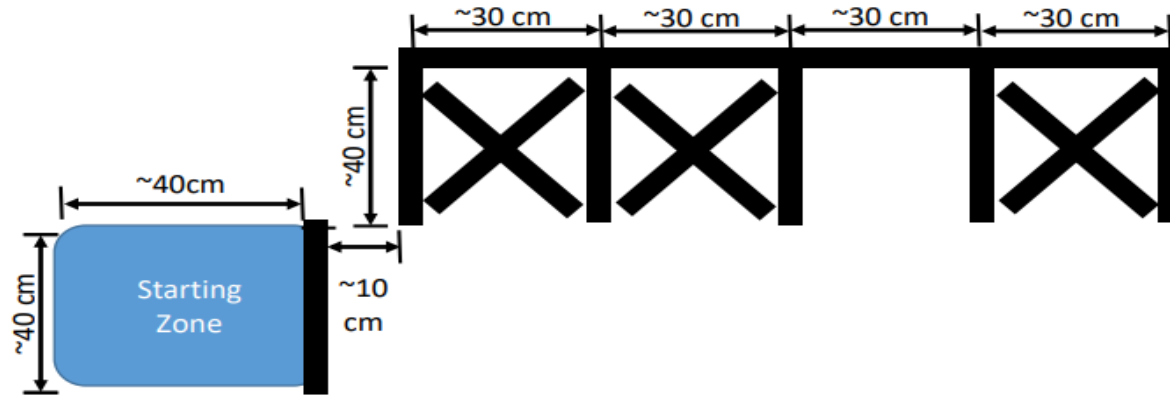


UMC Today – Auto Parking – Junior

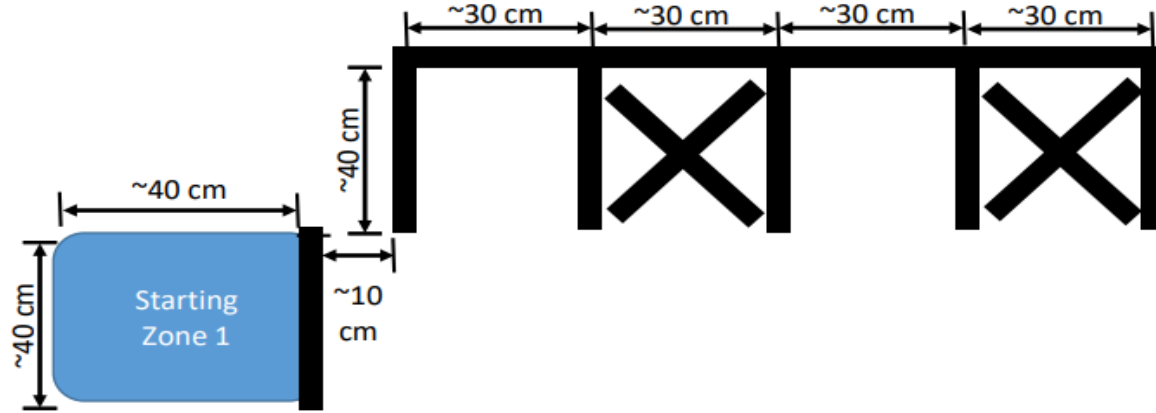


Your robot must autonomously park into an empty parking spot. The lines of parking spots will be denoted by dark tape on a light color surface. The parking slots will be approximately 30 cm wide and 40 cm deep. Your robot must park in an empty parking spot (there may be multiple empty parking spots). The parking spot status (empty or full) will be unveiled at run time. An occupied parking spot will be denoted by a large X constructed with dark tape. The robot may only be touched by competitors in the starting zone. To terminated the run, please stay parked in an empty parking spot for 5 seconds.

Time Limit = 2 minutes

Maximum Robot Size = 30 cm x 30 cm x 50 cm (for the entire run)

UMC Today – Auto Parking – Senior



Your robot must autonomously park into **each** empty parking spot for a minimum of 5 seconds. The lines of parking spots will be denoted by dark tape on a light color surface. The parking slots will be approximately 30 cm wide and 40 cm deep. Your robot must park in an empty parking spot (there may be multiple empty parking spots). The parking spot status (empty or full) will be unveiled at run time. An occupied parking spot will be denoted by a large X constructed with dark tape. The robot may only be touched by competitors in the starting zone. To terminated the run, please stay parked in the last visited empty parking spot for 5 seconds and have the robot beep.

Time Limit = 2 minutes

Maximum Robot Size = 30 cm x 30 cm x 50 cm (for the entire run)

Additional Information

Competitor interaction with the robot during runs

- Contestants may only touch the robot when it is in the start zone to begin the run
- If a contestant touches the robot outside of the start zone, the run is terminated and no score will be given

Starting Zone / Parking Lot Information

- The starting zone is approximately 40 cm x 40 cm in size
- The contestants may place the robot in any location in the starting zone
- The entire robot must be in the starting zone to start the run

Additional Information

Parking Legally – Unoccupied Spot

- To get credit for parking in a spot, the robot must parking legally = the entire robot must be inside the parking spot
- The lines are part of the parking spot

Parking illegally – Occupied Spot

- If any part of the robot extends past the center of an “X” in a occupied parking location, you will be penalized for parking illegally

Additional Information

Parking lot and starting zone dimensions

- Please note that all dimensions given are approximate
- The playing field will be available during robot build time to test the robot

Timing

- Each run will last a maximum of 2 minutes

Scoring

- A sum of run 1 and run 2 scores will be used to compute a total score

Run Sequence

Step 1 – Robot place in specified starting zone, parking lot covered



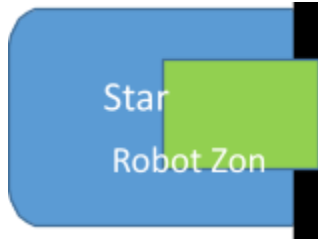
Run Sequence

Step 2 – Timer starts and contestants start the robot



Run Sequence

Step 3 – As the robot moves forward, the park covering is removed



Scoring - Junior

Scoring Rules

- You will receive points based on the follow criteria
- Robot leaves the starting zone: 5 pts
- Robot enters an empty parking spot: 10 pts
- Robot completely enters an empty parking spot: 15 pts
- Robot stays parked in an empty parking spot for 5 sec: 20 pts
- Parking illegally: -10 pts
- Total possible score: 50 points

Scoring - Senior

Scoring Rules

- You will receive points based on the follow criteria
- Robot enters an empty parking spot: 10 pts (once for each empty spot)
- Robot stays parked in an empty parking spot for 5 sec: 20 pts (once for each empty spot)
- Robot plays beep in last empty parking spot after 5 sec: 10 pts (only for last parking spot)
- Parking illegally: -10 pts
- Total possible score based on parking lot
 - 1 empty spot = 40 pts
 - 2 empty spots = 70 pts

- 3 empty spots = 100 pts
- 4 empty spots = 130 pts

Example Score Card Junior

UMC Auto Parking- Junior			
Team Name:			
Team Number:			Points
Run Score			
Robot leaves the starting zone		5 pts	
Robot enters an empty parking spot		10 pts	
Robot completely enters an empty parking spot		15 pts	
Robot stays parked in an empty parking spot for 5 seconds		20 pts	
Parking illegally		-10 pts	
TOTAL SCORE			

Example Score Card Senior

UMC Auto Parking- Senior			
Team Name:			
Team Number:			Points
Run Score			
Robot enters an empty parking spot		10 pts (once per empty spot)	
Robot stays parked in an empty parking spot for 5 seconds		20 pts (once per empty spot)	
Robot plays beep in last empty parking spot after 5 sec		10 pts	
Parking illegally		-10 pts	
TOTAL SCORE			