



# Istanbul Technical University Robot Olympics 2018

## Scenario Traffic Category Rules

### Definition of the Task:

- In this category, the robots try to follow the directions on the traffic signs and finish the track.

### Success Criteria:

- In this category, success criteria is to pass at least 3 signboards correctly.

### Robot Specifications:

- 1) The robots must be 20 cm in width, 20 cm in length and 30 cm in height in maximum.
- 2) There is no restrictions for the weight of the robots.

### Competition:

- 3) The track is black stripe matte folio above the white dakota.
- 4) The roads are 30 cm wide and the line is in the middle of the road.
- 5) Every robot competes on in order.
- 6) Signboards are blue coloured plexiglass.
- 7) Robots have 5 minutes to compete.
- 8) The robot which goes off the track will start from the previous checkpoint that it passed. Robots have right to make maximum 3 faults. The robot which make 4<sup>th</sup> fault will be disqualified.
- 9) There will be signboards on the road to show the missions to robots.
- 10) The signs will be on the right side of the road. The shapes of the tablets are shown below.
- 11) Signboards will be 15-22 cm in height.
- 12) The 8 cm area next to the tablets is a white line on black floor.
- 13) There is a waiting area in the track. In this section, the robot should understand the signs on the signboard and wait 10 seconds on that part.
- 14) Robots will reach the parking lot by following the signs correctly.
- 15) At the signposts there will be signs to refer turn right, turn left, wait 10 seconds, go straight, the parking place.
- 16) Signs and meanings in the tablets are available in the last 2 pages.



- 17) If there is no sign , robots must follow the line.
- 18) If robot comes a junction without see a signboard , must continue straight on its way.
- 19) Points can be taken only once from each sign.
- 20) Robots which read the signs correctly and perform assigned tasks get points according to the difficulty of the task.
- 21) The robot which has high point is in the top rank.

### **Scoring:**

- 22) All correctly followed signs except the Car park and waiting area worth +10 points.
- 23) All signs except the Car Park and the waiting area that are followed incorrectly worth -10 points.
- 24) Waiting in waiting point is worth +30 points.
- 25) It is worth +60 points to enter the park in the parking lot.
- 26) Do not stop in the park or park at the wrong place in the parking lot is worth 20 points.

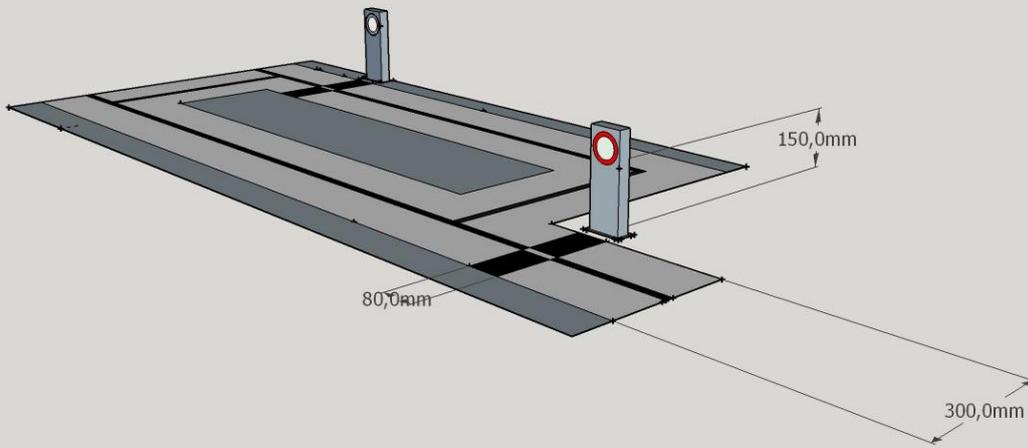


Figure 1 – Signboards



### Signs and their meanings



Turn left



Go straight



Turn right



Wait 10 seconds

### Car Park Signs





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## Original Size Of Signs





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