



Istanbul Technical University Robot Olympics 2019 Line Follower Junior Category Rules

Age limit:

Children between the ages of 6-14 can participate.

Definition of the task:

In this category, the robots attempt to complete the track without leaving the gray border lines on the track.

Success Criterion:

Success in this category is to complete the track without filling the penalty upper limit.

Robot specifications:

- 1) Robots must not exceed 25 cm in width, 35 cm in height and 20 cm in height.
- 2) There is no limit in weight.

Track specifications:

- 3) The track is made of white colored marker.
- 4) The road that the robot should follow is composed of black lines on a white background.
- 5) There are gray border lines at the right and left 80 mm from the line on the track being followed.
- 6) It is forbidden to step on the track outside of the marked areas.

Competition:

- 7) Each robot competes in turn.
- 8) The incoming competitors put their robots behind the starting line.
- 9) Robots start the competition when they command the referee. When the start line is reached, the robot begins to run.
- 10) After passing through the starting line of the robot, it tries to reach the finish line without going out of the boundary lines.
- 11) The robot should not go beyond the boundary lines. If robot goes out, it makes a mistake and gets a penalty of leaving the pit.
- 12) Where the lines intersect, the robots must continue in the same direction.
- 13) In addition to all competitions, the "Category-above rules" apply in this

category.

Scoring:

14) $\text{score} + \text{time} = \text{time} * 0.2 * (\text{number of exiting the track})$

15) Robots have 3 mistakes. The robot, which makes four mistakes, is disqualified.

16) Robots with low score are in the top rank.