

Autonomous line follower

ABOUT:

Is your bot coded well enough to follow the line without any mistake, you better think twice..... This is the place where even the best of bots take wrong directions!!! Take up the challenge and prove us that there is no turn which your bot can not pass

TASK:

The objective of this competition is to make a robot that can follow a Track indicated by black lines on a white background.

ARENA DETAILS:

1. The arena will be of dimensions 6ft x 4ft.
2. Crossovers are permitted, but will be at right-angles only. Line followers shall not turn left or right at a crossover.
3. Surface of the racing track will use base material suitable for racing such as a flex banner. The surface of the racetrack shall normally be level, with black line on white background.
4. The thickness of the line may vary from 2-3 cm.

GENERAL RULES:

1. Each team can have a maximum of 4 members.
 2. Students from different educational institutions can form a team (OPEN to ALL).
 3. There is no restriction to the number of teams participating from the same institute.
 4. No person can be in two teams for the same event.
 5. All teams must be present before the commencement of the event. Teams will be disqualified if they do not turn up during the slot allotted to them.
 6. There will be just one round. Points shall be gained for efficient traversal and overall least time taken to traverse the whole track.
 7. Serious damage to the path will lead to immediate disqualification.
 8. Winner will be decided on descending order of points gained.
 9. Line Followers must be self-contained, except for power supply which may be drawn by a wire. (Power Source will be provided if required).
 10. The Line Follower shall have a specified maximum number of attempts (to be decided by the Organizer on the day of the race, typically less than 3) to test run the track.
 11. If a Line Follower leaves the line, and has not crossed the finishing line, points will be deducted as per specifications given on the track.
- The decisions of the coordinators are final and binding.

BOT SPECIFICATIONS:

1. A Line Follower shall not exceed 25 cm in overall length, 25 cm in overall width and 20cm in overall height
2. Line Followers must be self-contained, except for power supply which may be drawn by a wire. (Power Source will be provided if required).
3. Except for the battery pack, the handler shall not make any addition, removal, replacement or change to the hardware of a Line Follower during a contest. It is however permissible to make minor

repairs.

4. AC (mains) supply too will be provided
5. Each team should carry their own DC power adaptor.
6. No systems will be provided for coding purpose.