

AUTONOMOUS LINE FOLLOWER

ABOUT:

A line follower robot is a robot able to detect and track a line even if the path is altered by changing the shape of the line. Usually, this robotic application is intended to be a popular choice for beginners, which can use it for fun or to improve the electronics and programming skills.

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:

- The arena will be of dimensions 6ft x 4ft.
- Crossovers are permitted, but will be at right-angles only. Line Followers shall not turn left or right at a crossover.
- The track would be black in color on a white background.
- The thickness of the line may vary from 2-3 cm.

FINALE:

The track will have dead ends, colour inversions & discontinuity.

GENERAL RULES:

- Each team can have a maximum of 4 members.
- Students from different educational institutions can form a team (OPEN to ALL).
- There is no restriction to the number of teams participating from the same institute.
- No person can be in two teams for the same event.
- 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.
- There will be a qualifying round and the FINALE!!



Serious damage to the path will lead to immediate disqualification.

The decisions of the coordinators are final and binding.

BOT SPECIFICATIONS:

- A Line Follower shall not exceed 25 cm in overall length, 25 cm in overall width and 20 cm in overall height
- Line Followers must be self-contained, and not externally operated by wire or by remote radio control during the race
- 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.
- AC (mains) supply too will be provided
- Each team should carry their own DC power adaptor.
- No systems will be provided for coding purpose.