MITRA-DEXBOT

Line follower Event

The objective of this event is to complete the track in the shortest period of time while accurately tracing the line from Start to Finish.

Bot Dimensions

Maximum allowed size 20cm * 30 cm(Width*Length)

Any number of sensors can be used.

Line width : 2cm

Obstacle dimensions

10cm*5cm (Length*Width)

General Instructions

Team should have two or three members

Bot must be autonomous. Also bot must not fly or jump.

Points will be time based

If robot is touched manually it will be counted as a skip.

Skip Penalty: Pentaly of time period is added to the track completion time.

No red flag bonus: Bonus of time period is subtracted from the track time.

Skip penalties and No red flag time periods will be fixed based on track size.

1st Round(Obstacle detection)

Obstacle with specified dimensions are placed in the track.

Bot must stop near every obstacle avoiding collision within the range of 10 cm from the obstacle and also led light must glow for getting green flag.

Obstacle is removed after getting green flag.

When bot collides with obstacle , it gets a red flag. Each red flag is considered as a skip.

Bot completing the track in lesser time gets a yellow flag. Also bots with no red flag gets the yellow flag.

Final Round(Obstacle Avoidance)

Bots with yellow flag can participate in final round.

Some Bots do not require a human for avoiding obstacle. Let us see it is also your bot that avoids obstacle on its own.

Just Bypass the obstacle and join the track again.

When bot collides with obstacle , it gets a red flag. Each red flag is considered as a skip.

Fastest bot (Including No red flag bonus and skip penalties) completing the track wins the event.