TOPBOT

PRIZES WORTH - ₹25,000

There will be Two tracks in TopBot-
- Line Follower
- Obstacle Avoider

Line Follower :-

Participants will have to make an autonomous bot whose aim will be to follow path mark by black line of width '3 cm' over white background. They are not allowed to use IR module.

There will be 2 rounds:
1. 1 vs 1 Knockout - 2 bots will race to finish line, winner will proceed to next round
2. This round will have challenging track, rules regarding which are written below. Each participant will go around the track individually and at end winner will be declared.

There will be checkpoints along the track crossing which will fetch points. In case of tie, the bot with least time will be declared winner.

There will be certain disruptions along the normal track which may include (and not be limited to) following:
- Certain sections of track where line is thinner (2cm) than usual
- Certain sections of track where line is thicker (4cm) than usual
- Strike-through on path
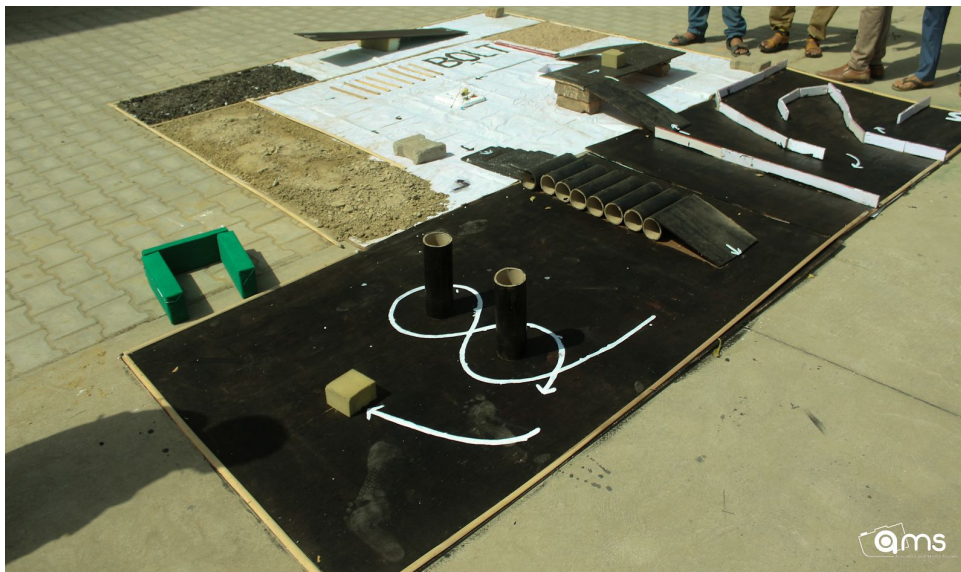- Dashed Lines - Spaces between dashes may be from 2cm to 4cm

- Paths with disruptions as shown

3CM

7CM

3CM

5CM DIAMETER

Obstacle Avoider-

Participants will have to make a bot to be controlled wirelessly using any microcontroller of choice. They will have to control the bot to follow a specific path made by organizers which may include (and not be limited to) rough terrain. There will be checkpoints along the path crossing which will fetch points. Time taken to complete the course will also contribute to the points. In case participant has to 'touch' bot, points will be deducted.

For reference, participants may have a look at the given image. This was the track for TopBot 3.0

Rules-

- Participants are free to use their own kits, any other components of choice unless they violate rules mentioned
- Use of Microcontroller or Microprocessor is compulsory
- Bot must be wireless i.e. No kind of tethering is allowed, for controlling as well as for powering
- Bot Dimensions (max) - 25cmX15cm
- Maximum time of 20 minutes will be allowed for completion of track.
- Teams of max 2 participants is allowed per track.
- A team may take part in one or both events.
- Measurements given may vary by upto 10%, so participants are required to have their Bots adjusted

Entry Fee-

For Line Follower- Rs 150 per team
For Obstacle Avoider- Rs 200 per team

For Kits, Rs100 extra will be charged

Kits include Chassis, Arduino, Bluetooth module (for Obstacle Avoider), LDR and LED (5 pairs for Line Follower), Motor Driver, Motors and wheels only

Organizing Team

1. Dr. Suneel Yadav, Coordinator DIC, SPOKE-IIITA
2. Pulkit Goel - IEC2017019 -8920970945
3. Manish Jagnani - IIT2017503 - 9113789552
4. Anshul Agarwal - IWM2017008 - 8279862680

Event will be organised on Right side of Auditorium.
Event will be held from 29 to 31 March