



Maze Runner

Can your robot beat the others and get you to the prize? Come and find out at the Maze Runner event, Tantrafiesta.



About The Event

Maze Runner is an event based on the black line follower robot. The robot will have to sense the black path and move accordingly. Optimisation and speed will get you the win.

Rounds

The event will be divided into two rounds

Round 1: Black Hole

This path follower round will be a simple qualification round. Just the autonomous robots have to trace black line and reach the finish line. Top 50% robots (point based) will qualify for the Ultimate Maze Runner Round.

Round 2: The Ultimate Maze Runner

In this round, a path will be there in the form of a maze. The robot has to track it accordingly. The total points will be calculated based on the criteria mentioned below. Winners will be decided based on the total points.

Rules*

Round 1: Black Hole

- 1. This will be a qualification round.
- 2. The width of black colored path will be 30mm.
- 3. The length of black colored path will be around 5 metres.
- 4. One team at a time will compete on the field.
- 5. The order of teams will be decided randomly.
- 6. You can touch the bot maximum 3 times.

Round 2: The Ultimate Maze Runner

- 1. This is the decider round.
- 2. The width and length of black colored path will be same as Round 1.
- 3. The length of the path will be around 10 metres.
- 4. This zone, like any other maze zone may contain false path leading to a dead end. Only one path will lead to the finish line.
- 5. You can touch the bot maximum 3 times.
- 6. Expect some surprises here!

Game Rules

1. The team should not exceed 4 members.

- 2. After first run of The Ultimate Maze Runner Round, teams will be allowed to do hardware or software changes, before second run.
- 3. After the autonomous bots starts, the team's members are allowed to touch it no more than 3 times! Otherwise they are disqualified.
- 4. The path will be shown to a team 5 minutes prior to their round.
- 5. In case of a draw, time will be given priority to resolve the draw.

Bot Specifications

- 1. The bot must be completely autonomous.
- 2. It is not allowed to leave any part or any mark behind while moving forward on the arena. If found so, the team will be liable for disqualification.
- 3. Teams are allowed to use ready-made microcontroller boards/ready-made sensor kits.
- 4. However, teams are not allowed to use ready-made Lego kits or any such assemblies.
- 5. The autonomous bot must use an on-board power supply. No external power supply will be allowed.
- 6. Each team should bring their own power supply.
- 7. The autonomous bot should not receive any input-navigational-signal from outside arena.

Judging Criteria

- 1. Covering Round 1 and Round 2 will award you 100 points each.
- 2. Touching robots (after it leaves start line and before it touches finish line) each time will result in subtraction of 10 points.
- 3. The points and position distribution is as follows:

 1st position 100 points
 - Subsequent positions (-10) points

Registration Fees

Rs 200 for a Team upto 4 members.

Date and Venue: 28th & 29th Sept.

IIIT Nagpur, BSNL RTTC, Seminary Hills, near TV. Tower, Nagpur (440006)

- Stay tuned to our website <u>www.tantrafiesta.in</u> for registrations and updates.
- For more info please feel free to contact us on:

Co-head(lead)

Name: Pulkit Batra Number: 9873155586 Co-head (Subordinate) Name: Gokul Kumar Number: 8309084325

Member

Name: Vedant Rathi Number: 7775938123

Note:

- In case of any discrepancy, decision made by the team "TantraFiesta 2k19" will be final.
- COME 1 HOUR PRIOR BEFORE COMPETITION. SCHEDULE IS SUBJECT TO CHANGES.

 *The rules are subjected to be changed without prior notice