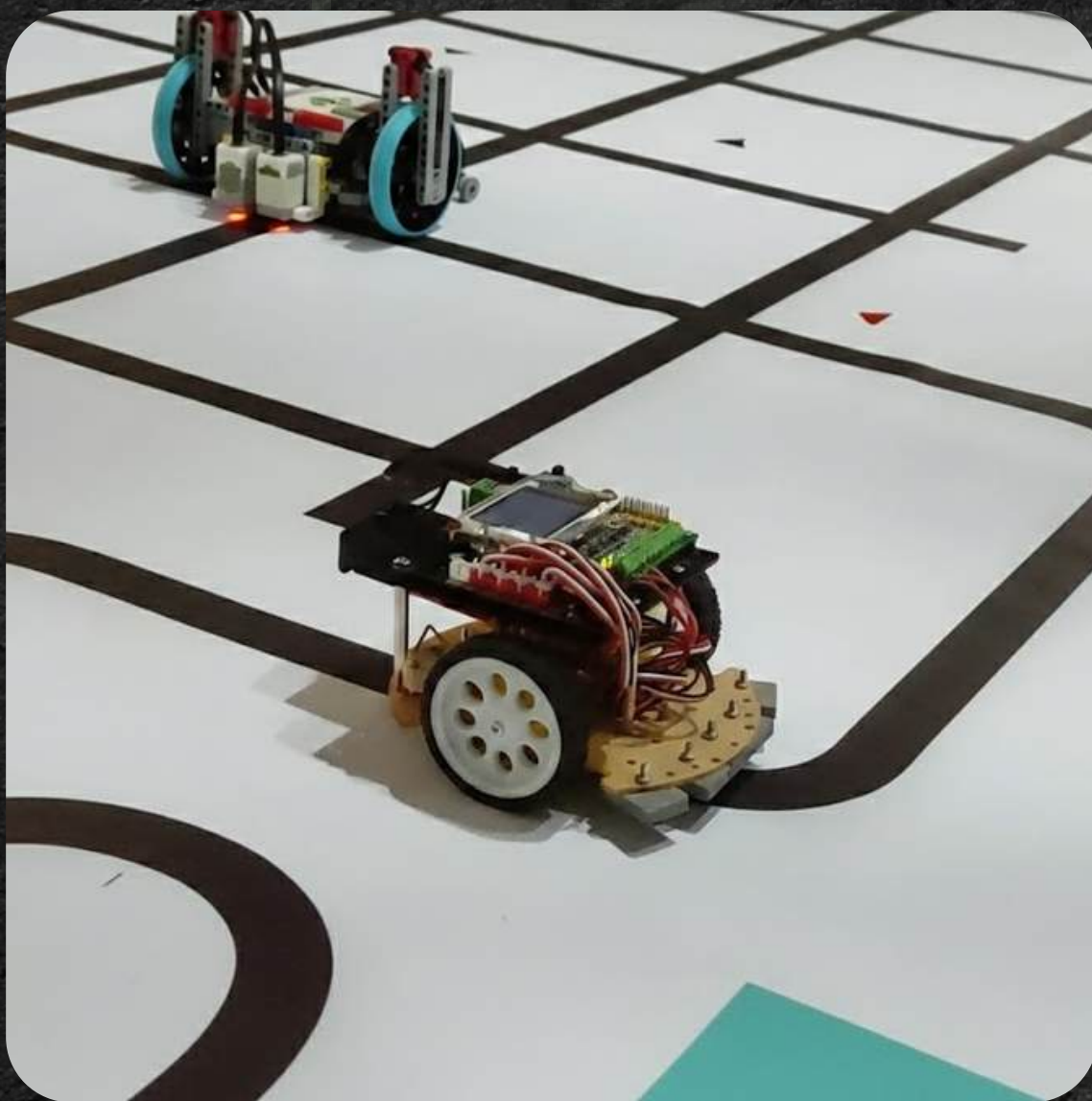# ROBO 3.0 RUMBLE

**BUILD.COMPETE.DOMINATE**

## INSIDE THE EVENT: RULES & PROCESS

## LINE FOLLOWING BOT

*"A precision-based challenge where robots autonomously follow a predefined line, testing accuracy, speed, and algorithmic control."*



### OBJECTIVE:-

Teams will design and build an autonomous robot capable of navigating a predefined track by following a black line on a white surface. The event emphasizes precision, speed, and technical expertise. Participants must demonstrate their bot's ability to tackle various challenges, such as sharp turns, intersections, and curves, without human intervention.

### GENERAL GUIDELINES:-

- Each team can have 3-5 members.
- Only undergraduate and School students with valid college/school, IDs are eligible to participate.
- The bot must operate autonomously, using onboard sensors and controllers.
- Only onboard batteries are allowed as the power source. External power sources are prohibited.
- The bot must not damage the track; otherwise, the team will be disqualified.
- Registration amount is ₹400/- per team

# INSIDE THE EVENT: RULES & PROCESS

## DIMENSION OF BOTS:-

- **Width:** Not More Than 30cm
- **Length:** Not More Than 30cm
- **Height:** Not More Than 30cm

## REWARDS AND PRIZES:-

- 1st Position: 7,000 Rupees + Winning Certificate + Trophy
- Frirst Runner Up: 5000 Rupees + Winning Certificate + Trophy
- Second Runner Up: 3000 Rupees + Winning Certificate + Trophy
- All the participants will get Participant e-Certificate

## POWER SOURCES:-

- Only onboard batteries are allowed as the power source.
- External power sources are prohibited.

## ARENA DETAILS-

- The track will consist of a black line (3-4cm wide) on a white background.
- It may include curves, sharp turns, and intersections.
- The arena layout will not be disclosed before the competition to ensure fairness.

# INSIDE THE EVENT: RULES & PROCESS

## GAMEPLAY:-

- Each team is allowed 2 attempts to complete the track. The better of the two timings will be considered.
- The maximum time allowed per attempt is 5 minutes.
- The bot must restart from the previous checkpoint in case of a deviation.
- Teams are not allowed to modify their bots during the competition.
- The bot with the fastest time wins.

## TIME PENALTIES:-

- 5 seconds for track deviation.
- 10 seconds if the bot requires manual intervention to be repositioned on the track.
- Bonus points may be awarded for completing challenging sections flawlessly.

## DISQUALIFICATION CRITERIA:-

- Use of external control mechanisms (wired or wireless) during the run.
- Causing damage to the track or interfering with another team's performance.
- Violation of bot size or specification constraints.
- Judges' decisions are final and binding.
- Voltage is capped at 12V DC.