TRIDENT ACADEMY OF TECHNOLOGY

ROBOMAGE CLUB

(A Technical Club for Robotics, Mechatronics, Artificial Intelligence and Image Processing)

http://roboclub.tat.ac.in/

First Event

Date:16/02/2018 Time:-11.00AM

Battle Bots –Survival of Robots

An Autonomous Robotic competition

Event

An arena will be designed by the coordinators and all participant teams have to leave their bot in it. An overhead camera will be attached over the arena, whose feed will be supplied to all participants. The Idea is a battle among all the bots at once just by shooting without any physical contact among the bots. Participants have to design their own algorithms to attack and dodge. A rectangular piece of thermocol will be fixed on top of the bots without hindering the sight of the aruco markers, which will be treated as life of a bot. The last bot standing will be the winner.

Goals

1. Participants will learn Python, the concept of Computer Vision, Arduino Coding & XBee interfacing.
2. The Event will raise Robot Enthusiasm as the participants will be working on live, hands on project.
3. The competition will seem more life like and be thrilling.

Rules & Regulations

1. No bot should make direct physical contact with the other, any intended actions to damage the opponents bot with human interference will lead to disqualification.
2. Once all three Health Thermocol are damaged the bot will be eliminated.
3. All bots must be of length : 12 inch and width 12 inch.
4. Each team must have 5 members.

Requirements

1. Arduino Uno
2. Servos
3. Motors
4. Wheels
5. L293D Motor Driver
6. Arena
7. USB Camera
8. Wheels
9. Chassis Material
10. Motor Clamps
11. Sonar

Setup Cost

Sl No	Component	Approx Cost Rs
1.	Arduino Uno	400
2.	Servos Two Nos	240
3.	Motors Two Nos	240
4.	Wheels	150
5.	L293D Motor Driver	190
6.	Arena	600
7.	USB Camera	1800
8.	Flex Two Nos	1000
9.	Chassis Material	100
10.	Motor Clamps	30
11.	Sonar	400
12.	Misc	300
Total		**Rs 5450/-**

1st Prize- Rs 7000/-

2nd Prize-Rs 6000/-

3rd Prize-Rs 5000/-