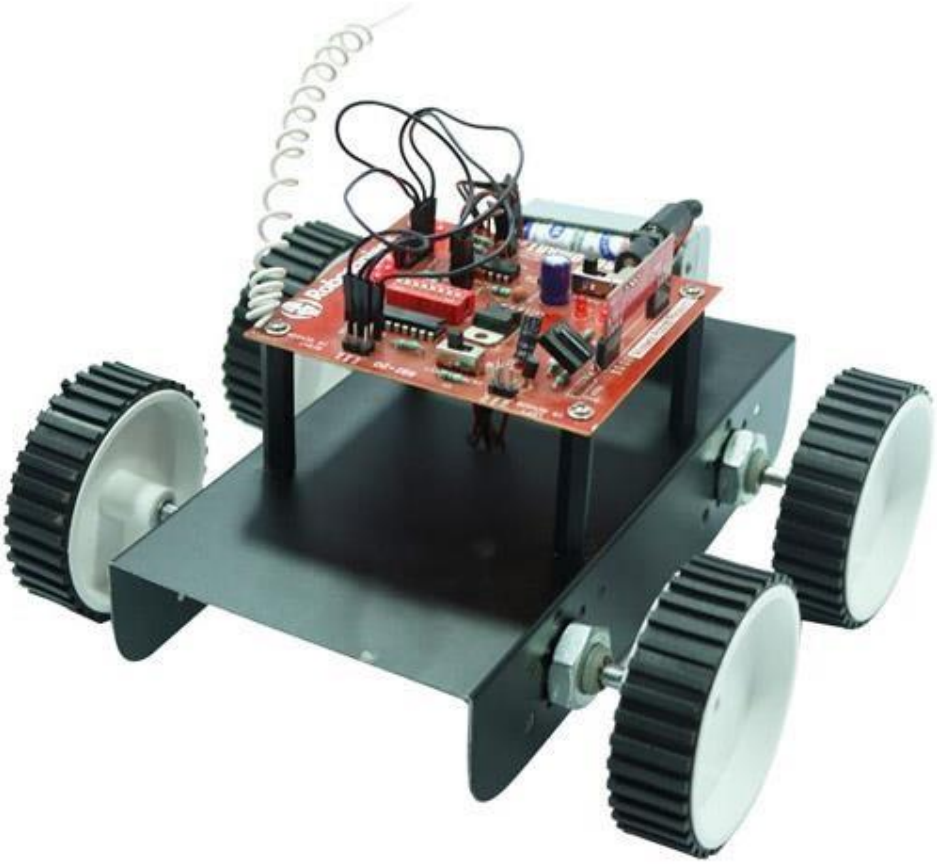
Radio Frequency Controlled BOT



Content

1. Introduction

Dr. Steve Dawkins wants to design a robot able to make its way through the obstacles of a mysterious cave in the forests of Sikara where an important element lies for his research. It would be better if the robot reaches there in minimum time because he is not the only one behind it.

2. Problem statement

Task is to build a Radio Frequency Controlled Bot without using microcontrollers that can effectively navigate obstacles. The Bot is required to navigate through a set of obstacles in the arena to reach the goal in minimum amount of time.

3. Event Rules and Specifications

3.1. Team Size

- Students from different colleges can form a team. A team may consist of at least 2 members and should not exceed more than 4 members.
- The students must carry valid student ID cards of their college which they will be required to produce at the time of registration.
- Participants shall not be allowed to be a part of more than one team

3.2. Eligibility

Any student from a recognized institute/college can participate in this event.

3.3. Rules

- There will be certain number of check points on the track, which will be informed to the participants before the start of the run. If a machine touches boundary of track, then it will be placed back on the last check point the machine has passed.
- The timer will keep running during this process. No strategic timeout advantages. If a Bot is unable to move for more than 30s then it will be disqualified.
- There should be on board power supply not exceeding 9V (on board).
- Microcontroller in bot is not allowed.

3.4 Specifications

- The robot width must not be more 30cm.
- Maximum voltage in the circuit should not exceed 9V at any time.

4. Judging Criterion

- The winner will be decided on the basis of minimum time taken by the bot to complete the track.
- Each team will be allowed two runs. The minimum time of these shall be considered for judging.
- The top three teams will be granted with certificates and prizes.
- Certificate of participation will be given to all teams participating in the event.
- Time measured by any contestant by any other means is not acceptable for scoring. In general, the decision of the organizers will be final and binding in all circumstances.

All decisions taken by the organizing team will be deemed as final, and no more changes will be encouraged, thus holding the full authority to change any of the above rules as per circumstances.

5. Resources

https://www.youtube.com/watch?v=Hgez5dYyEbA

6. Contacts

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