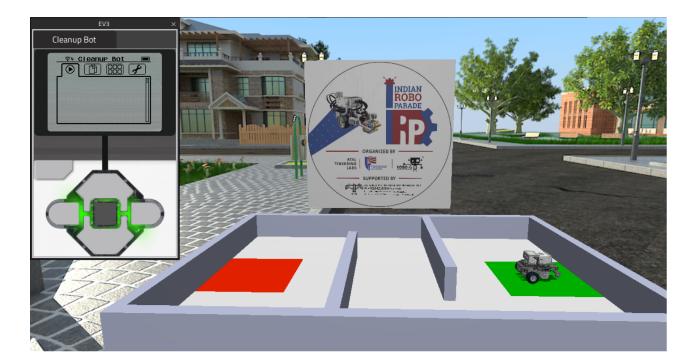


## Virtual Robotics Competition date is 16th & 17th January 2021

#### For age group 8+ Years Old

# A SMALL LABYRINTH – IRP 2020-21



Register Now: https://robog.in/indian-robo-parade

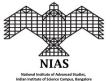
The end time to fill the registration form is 15<sup>th</sup> January 2021 at 6:00 pm IST.

ORGANIZED BY











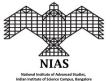


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## About INDIAN ROBO PARADE

Indian Robo Parade (IRP) is an initiative of **ROBO-G** in collaboration with **ATAL Tinkering Lab**, **Vidyashilp Academy** and **National Institute of Advanced Studies (NIAS)** to ignite creative young minds towards STEM.

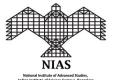
The objective behind organizing the event is not only to enhance the students' technical knowledge of robotics but also to develop their creativity and problemsolving skills through such competitions

**Indian Robo Parade** is conducted every year to motivate children to understand how robots work and behave.

Due to covid-19 we could not organize a physical event this year. So we are organizing IRP 2020-21 virtually. Where students can participate in a virtual robotics competition.











## **Important General Rules**

- All teams must consist of just one competitor.
- It is not allowed to make changes in the environment before, after and during the simulation.
- In this challenge it is not allowed to upload your own robot.
- When the simulation starts, the competitor can only use the camera's tools and the scoreboard button.
- All the tasks need to be solved only by using the code created by the participant for the robot.
- Competition date is 16<sup>th</sup> & 17<sup>th</sup> January 2021
- On 16<sup>th</sup> January 2021 10 AM IST competitors will have access to the competition mats.
- The end time to submit results of your competition is 17<sup>th</sup> January 2021 at 10:00 PM IST
- Competitors will have **36 hours** to submit results on the competition.
- The scoring type will be Best Round, the parameters are Best score and Lowest time.
- The competition consists of 10 rounds, competitors can test as many times as they want, but they can only submit results 10 times.
- Participation certificates will be provided. Top 3 participants will get special certificates.

Note: The end time to fill the registration form is 15<sup>th</sup> January 2021 at 6:00 pm IST.











## **Robot Mission**

Make a program with LabView from LEGO® Education EV3 Mindstorms, which gives you Instructions to the robot to move from the green square to the red square through the Labyrinth. Each Once you pass the curves, you will receive 5 points for each correct turn and final points when you reach the red box. The total Maximum Score is 20 points per round. Once the challenge is finished, accept the option to upload the scores to RobotVirtualGames.com where they will reflect your scores and time you achieved.

#### How to win?

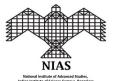
To win you have to achieve the maximum score in the shortest time possible in the total rounds specified in the challenge detail box.

### **Learning Objectives**

- Learn to Learn
- Practice iconographic programming using Lab View
- Critical Thinking
- Development of Mathematical Logical Thinking focused on Algorithms.
- Manage stress
- Develop Emotional Intelligence











#### How to Participate?

#### Step 1

 You need the latest version of the Virtual Robotics Toolkit(VRT) on your computer and an active license. <u>https://www.virtualroboticstoolkit.com/download\_links</u> (Includes 15 days trial of the Virtual Robotics Toolkit software (Full version)

#### Step 2

• You need the latest version of the LEGO Mindstorms EV3 software <u>https://education.lego.com/en-us/downloads/retiredproducts/mindstorms-ev3-lab/software</u> (It's a free software)

#### Step 3

- Register on <u>https://www.robotvirtualgames.com/</u> using a Microsoft account. (If you don't already have an account, it's fast and free to set one up at <u>https://login.live.com/</u>)
- **Tutorial:** How to register & participate at Robot Virtual Games? <u>https://youtu.be/WZRJmHfU9hY</u>

#### Step 4

After finishing steps 1-3 fill this Google form and pay the registration fee (INR 400): <u>https://forms.gle/fVtjBHuRpfszdhvK6</u>

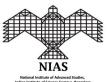
#### Step 5

 Register to A Small Labyrinth - IRP 2020-21 on Robot Virtual Games website: <u>https://www.robotvirtualgames.com/competitions/</u> on 16<sup>th</sup> January 2021 10 AM onwards.

Note: Registration fee includes access to the competition mat and 30 days free license of the Virtual Robotics Toolkit Software (Full version) which you can claim once your 15 days trail version expires.











## **Useful Virtual Robotics Toolkit Tutorials**

- 1. Introduction: <u>https://youtu.be/q286XL\_Q3GA</u>
- 2. Download, Install and Customizing user interface: <u>https://youtu.be/OH3rO3CBgrE</u>
- 3. Opening a project/selecting a challenge mat: <u>https://youtu.be/u0uKU0-A2UA</u>
- 4. Connecting VRT to EV3 software: <u>https://youtu.be/MjmKPGgId11</u>
- 5. The Toolbars and Simple & Advanced mode: <u>https://youtu.be/m0C-s9vdZAE</u>
- 6. How to participate in Robot Virtual Games?: <u>https://youtu.be/WZRJmHfU9hY</u>
- 7. Camera Control Options: <u>https://youtu.be/cHOn0LOouOE</u>

Note: If you need a proper training on Virtual Robotics Toolkit then contact us for more details M: +91 82772 51290 E: <u>robogofficial@gmail.com</u> W: <u>www.robog.in</u>





