



eYantra

Engineering a better tomorrow

ERTS Lab  
Department of Computer Science and Engineering  
Indian Institute of Technology Bombay,  
Powai, Mumbai-400 076.



## Certificate of Participation

This is to certify that [Kunj Patel](#), a student of [Institute of Infrastructure, Technology, Research and Management, Gujarat](#) has participated in the **e-Yantra Robotics Competition (eYRC 2022-23)**.

He/She is a member of the team having the following team members:

1. Kushagra Vyas
2. Arpit Mishra
3. Nidhi Choudhary
4. Kunj Patel

This team has participated in [Sentinel Drone](#) theme.

Prof. Kavi Arya  
Principal Investigator, e-Yantra  
Professor  
Department of Computer Science and Engineering  
Indian Institute of Technology Bombay



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## Theme: *Sentinel Drone*

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**Theme Description:** In this theme, the teams learn to manipulate drones wirelessly, leverage them for automating surveillance tasks, using methodologies like image processing and uploading data to GIS (Geographic Information Systems) systems. They first work on these tasks in simulation to hone skills, and finally learn to assemble a Nano drone and execute the same tasks on hardware!

**Theme Learning:** *Robot Operating System (ROS), Drone Gazebo, OpenCV, Git, Geographic Information System (GIS)*

**Team Learning:** The team has been awarded **Level 3** in the e-Yantra Robotics Competition (eYRC).

*This level indicates that the team was able to show a fair understanding of the problem statement by implementing a partial solution of the problem statement*

**Certificate Table**

Certificate Level	Certificate Description
Level 1	Certificate of Merit
Level 2	Certificate of Completion
Level 3	Certificate of Participation
Level 4	Letter of Participation

*\*level 1 > level 2 > level 3 > level 4*