

VR BASED TELEROBOT

BY

We Are VR

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WHY ARE WE DOING IT?

- In today's generation, nothing can sound more interesting than having to experience something without actually spending time and money to be there.

WHAT ARE WE DOING?

- We are integrating virtual reality with robotics to provide the user with first person view of the environments the robot is placed in.

HOW ARE WE DOING IT?

- We make use of a robot with a camera mounted on it. On the user end, we provide a virtual reality experience through virtual reality headset enabling end to end communication.
- This robot is equipped with a rocker bogie mechanism which enables it with an ability to climb staircase effortlessly and navigate through rough terrains easily.
- The gyroscope is used for tracking the user's head position. This information is transmitted to the robot and the camera on the robot changes its position based on the readings received, analogous to the position of user's head.

COMPONENTS REQUIRED AND ESTIMATED COST

Sl No.	Components	Qty	Cost	Remarks
1	Arduino	2	800	
2	Robot Chassis	1	2000	Price for both
3	Robot Wheels	4		
4	Camera	1	1200	4
5	Microphone	1	200	
6	Joystick/Smartphone	1	50	Available
7	Laptop	1		Available
8	Gyroscope	1	150	
9	VR Headset	1	1500	
	Total		7,400	

WHERE CAN WE USE IT?

- Defence
- Physically Challenged
- Forest Surveillance
- Teachers

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This project will help us
look at the world with
new lenses all
together!!