



## **DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING**

### **REPORT**

Session Topic: **Innovation in Robotics - Shaping the Future of Our Society**

#### **1.Objective of the Program:**

the human following robot is an automobile system that has ability to recognize obstacle, move and change the robots position toward the subject in the best way to remain on its track.The future of robotics evokes both exciting and cautious undertones as employees learn how to navigate human-robot workforce.

#### **2. Benefits /Outcome of the Program:**

##### **1. Better quality and consistency**

Along with other tech — such as the industrial internet of things (IIoT) or 3D printing robots — industrial robots are able to provide better production quality and more precise and reliable processes. Added benefits also include reduced cycle times and real-time monitoring to improve preventive maintenance practices.

##### **2. Maximum productivity and throughput**

An industrial robot increases speed for manufacturing processes, in part by operating 24/7. Robots don't need breaks or shift changes. The speed and dependability of robots ultimately reduces cycle time and maximizes throughput.

##### **3. Greater safety**

Using robots for repetitive tasks means fewer risks of injury for workers, especially when manufacturing has to take place under hostile conditions. In addition, supervisors can oversee the process online or from a remote location.

##### **4. Reduced direct labor costs**

The cost of having a person handle many manufacturing operations is often more expensive than robot. This can also free up workers so their skills and expertise can be used in other business areas, such as engineering, programming and maintenance.

#### 5. Keeping manufacturing in the U.S.

Some argue that robots are taking jobs away from U.S. workers, but that's not necessarily the case. Industrial robots there are typically integrated into a series of operations that require human expertise. For example, you could have a robot welding parts that are handed off to a person to perform a task that requires a human's intuitive "if, then" thinking.

### **3. Description:**

Today's industrial robots work in a wide range of industries, from semiconductors and automobiles to plastics processing and metal forging. Pretty much any repetitive operation is a great job for a robot, particularly if it's dangerous or difficult for people. The application of robots in manufacturing industries is particularly valuable. Robots have been used for high-volume operations, but as the technology advances and the cost of industrial robots decline, more options and opportunities are opening for medium- and small-sized operations.

4. Organized on: 9/11/2022

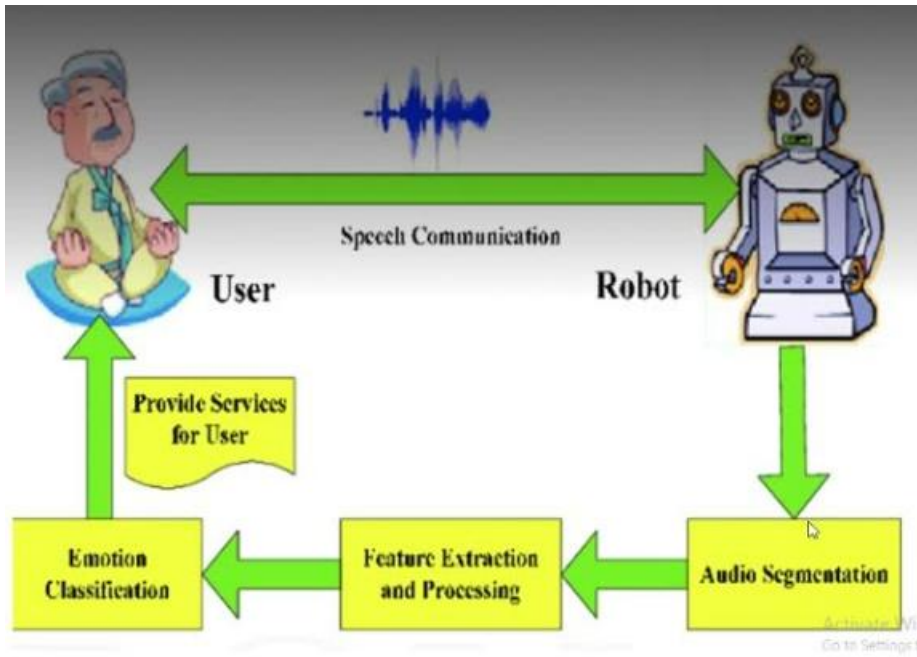
5. Student Participants number:41

6. Students /Faculty Registration Details with timestamp: yes

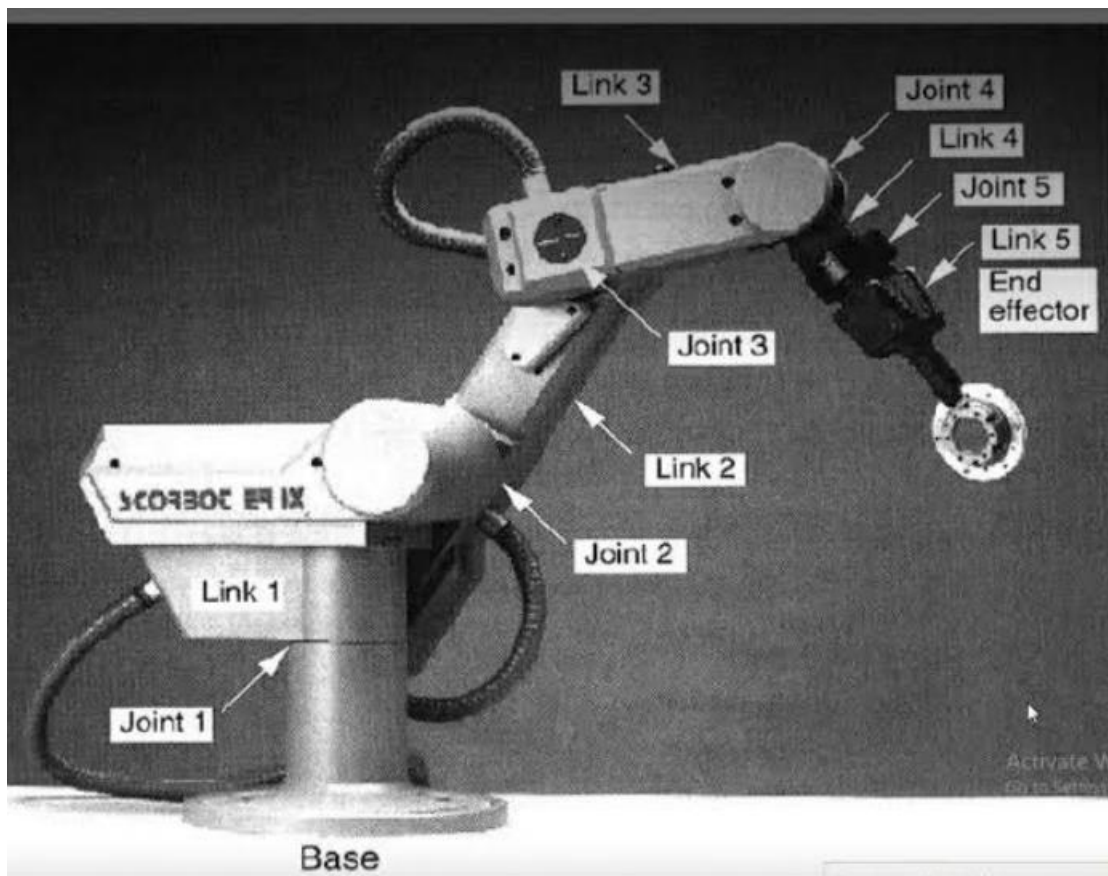
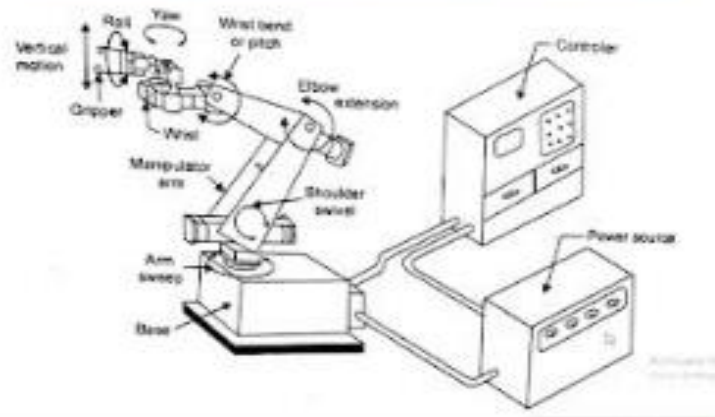
7. Faculty Participants number: 3

8. Expenditure amount if any:nil

9. Photographs (5 to 6)

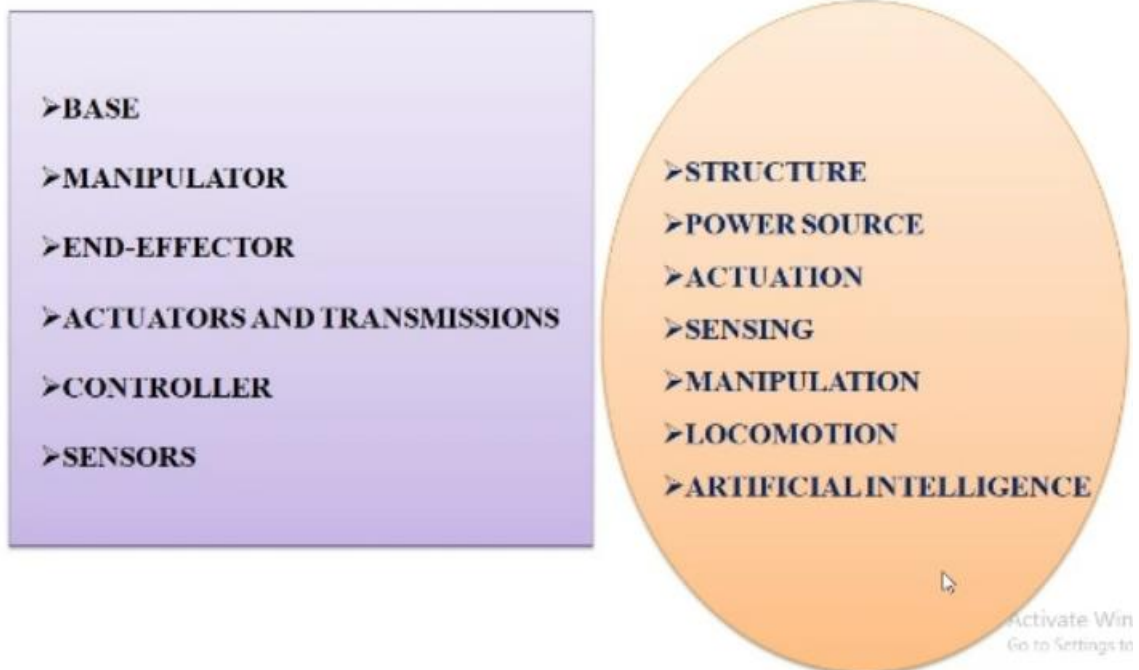


## 7. MAIN COMPONENTS OF ROBOT AND THE BASIC MOTION



## 6. IMPORTANT COMPONENTS OF ROBOT

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10. Video link url:

[https://drive.google.com/file/d/1sBRMJwNIMUTdsNiX8dC\\_dliNbwLxPtJ0/view?usp=sharing](https://drive.google.com/file/d/1sBRMJwNIMUTdsNiX8dC_dliNbwLxPtJ0/view?usp=sharing)

11. Poster








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**IIC 5.0-CMRTC**  
**Department of**  
**ECE**  
Organizes Session on

**Innovation in Robotics-Shaping the  
Future of Our Society**



**Speaker:**  
DR. KALI CHARAN RATH  
ASSOC. PROFESSOR  
GIET UNIVERSITY  
,GUNPUR, ODISHA

**9th November**  
**2022 11:20am**  
**Free**  
**Registration!**

**Registration Link:**  
<https://forms.gle/yPyk1noLp58AgtX48>

**Dr. K. Mohanalakshmi**  
Co-Ordinator

**Dr. Sudha Arvind**  
Convener, IIC  
CMRTC

**Session on:**  
<https://meet.google.com/otk-jvivj-csi>

**Prof. G. Srikanth** **Dr. K. Srujan Raju** **Dr. M. Ahmed Ali Baig** **Dr. A. Raji Reddy**  
HoD-ECE Department Vice President, IIC President, IIC Director  
CMRTC CMRTC CMRTC CMRTC

12. Keywords: Robotics, Robotics Applications, Robotics assembly, Spray Painting

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17. Speaker contact number: 9438105974

18. Social media Links:

<https://www.instagram.com/p/CkscvjsP9yP/?igshid=YmMyMTA2M2Y=>

[https://twitter.com/ICmrctc/status/1589908811347038210?t=RAMU7ds5LfjkSwXsRV10\\_A&s=19](https://twitter.com/ICmrctc/status/1589908811347038210?t=RAMU7ds5LfjkSwXsRV10_A&s=19)

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