



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

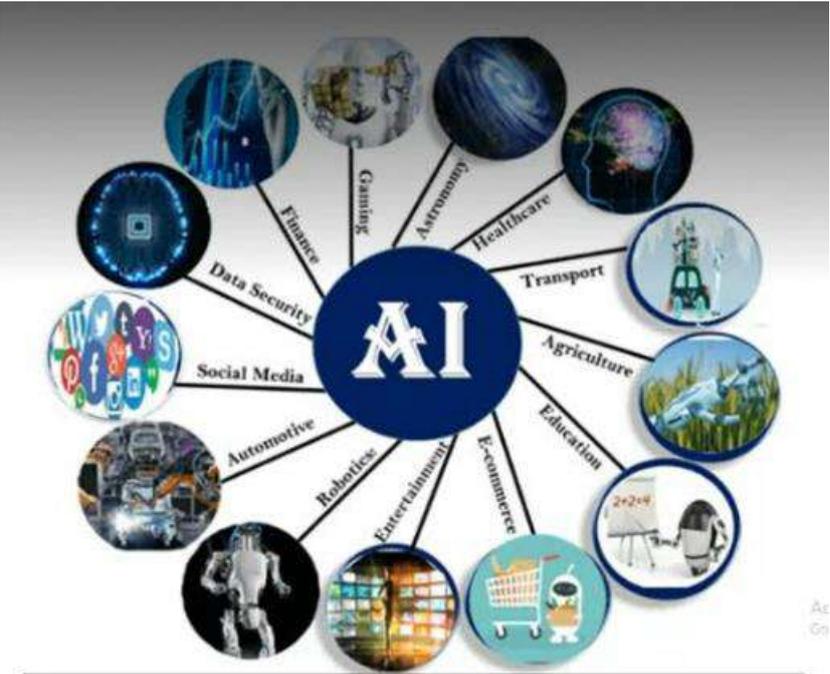
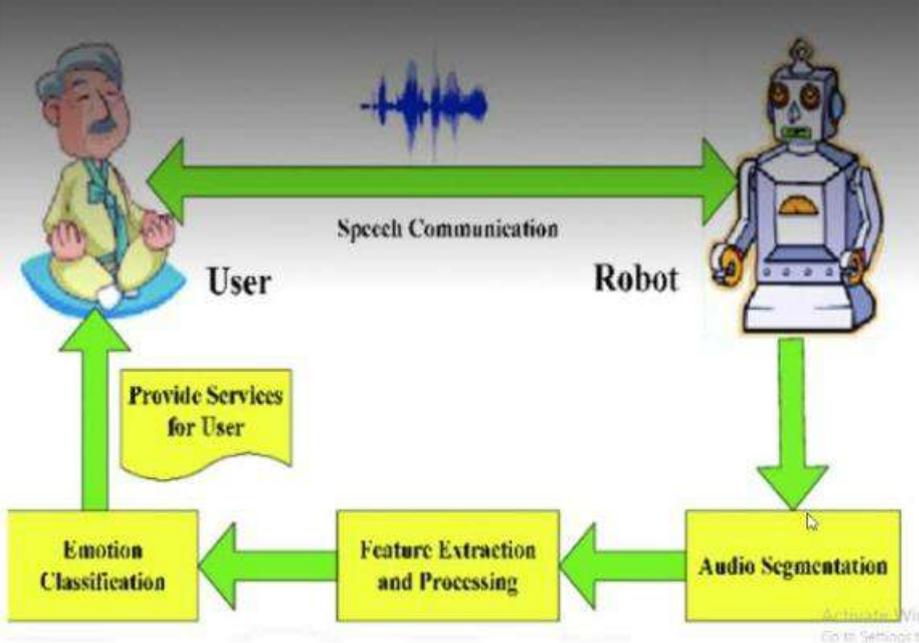
5. Student Participants number:41

6. Students /Faculty Registration Details with timestamp: yes

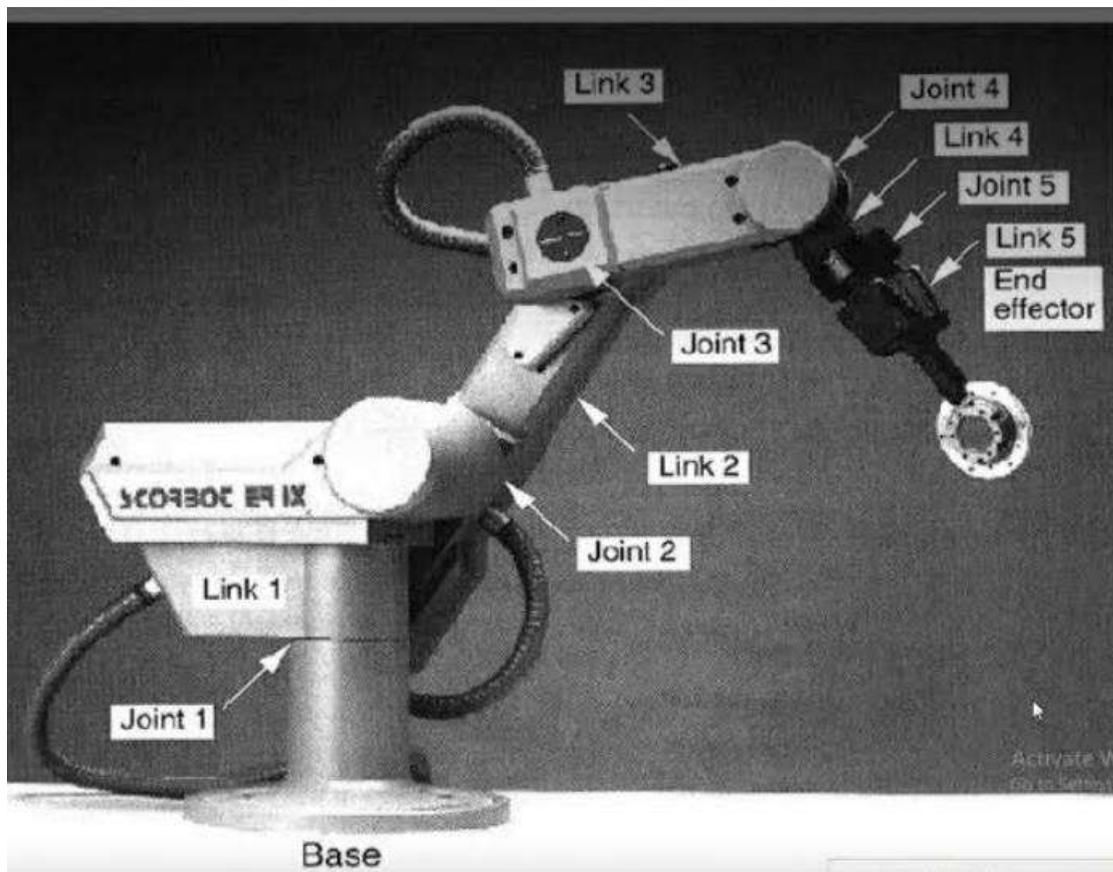
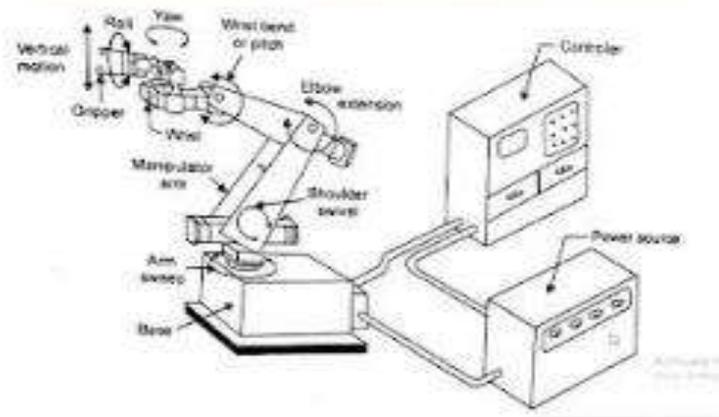
7. Faculty Participants number: 3

8. Expenditure amount if any:nil

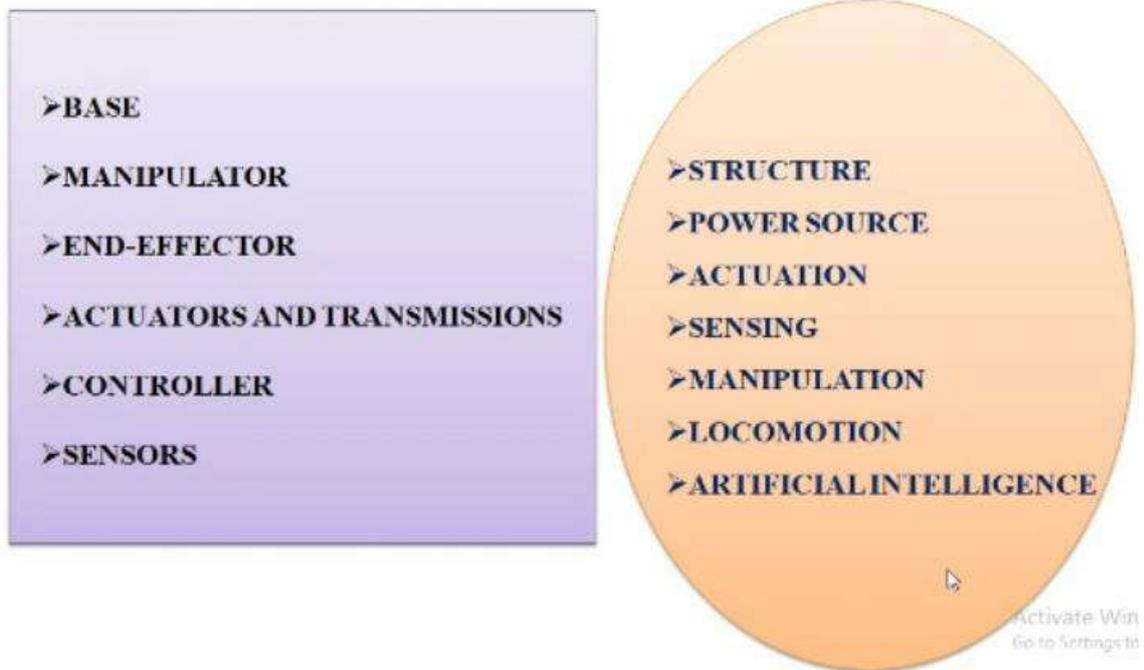
9. Photographs (5 to 6)



7. MAIN COMPONENTS OF ROBOT AND THE BASIC MOTION



6. IMPORTANT COMPONENTS OF ROBOT



10. Video link url:

https://drive.google.com/file/d/1sBRMJwNIMUTdsNiX8dC_dIiNbwLxPtJ0/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:
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9th November
2022 11:20am
Free
Registration!

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

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

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

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