Robotics Research

Procedure

Each group will research and present to the class information about the use of their assigned robot in today's society. Your group will have two days to research and prepare a presentation that includes the following information.

1. What task does the robot perform? What human function or task does this robot simulate?
2. Where is the robot used? What is its work envelope (how many degrees of freedom or flexible joints does it have)?
3. Is the robotic end effector multi-functional? If so, what other tasks can it perform?
4. How is the robot taught to perform its task?
5. What sensors does the robot have and how does the robot use these sensors?
6. Name some advantages and disadvantages of using a robot to complete this task.
7. Describe the impact that this robot has had or could have on its intended audience.
8. What type of jobs/careers can this robot create to provide employment for people?
9. Predict and explain how this robot may be altered to perform more or different tasks in the future.
10. Include sketches, pictures, and/or video of the robot performing its task in your presentation.

After listening to your classmates' presentations, write a paragraph in your GTT notebook to summarize what you learned about the various robots.

Conclusion

1. Based upon the information shared in the presentations, which robot do you think will have the most significant impact on humans and why?

2. What concerns do you have about the future use of robots in our society?

3. What do you think about "giving up" control to a machine?