

### Definition:



#### A robot is defined as:

• robot, any automatically operated machine that replaces human effort, though it may not resemble human beings in appearance or perform functions in a humanlike manner. By extension, robotics is the engineering discipline dealing with the design, construction, and operation of robots.

### Why are robots important in today's society?



Presentation adapted them Space For a dation Solution National Space (2009).

## Roles and jobs of robots

- Computer assisted manifacturing
- Military
- Medical
- Space exploration
- Personal
- Entertainment









• Robots are now in homes, at work and in every other aspects of our lives. They automate everything we do and take on ordinary tasks we once thought to be unenjoyable. Here are eleven robots that make life easier by doing our work for us.

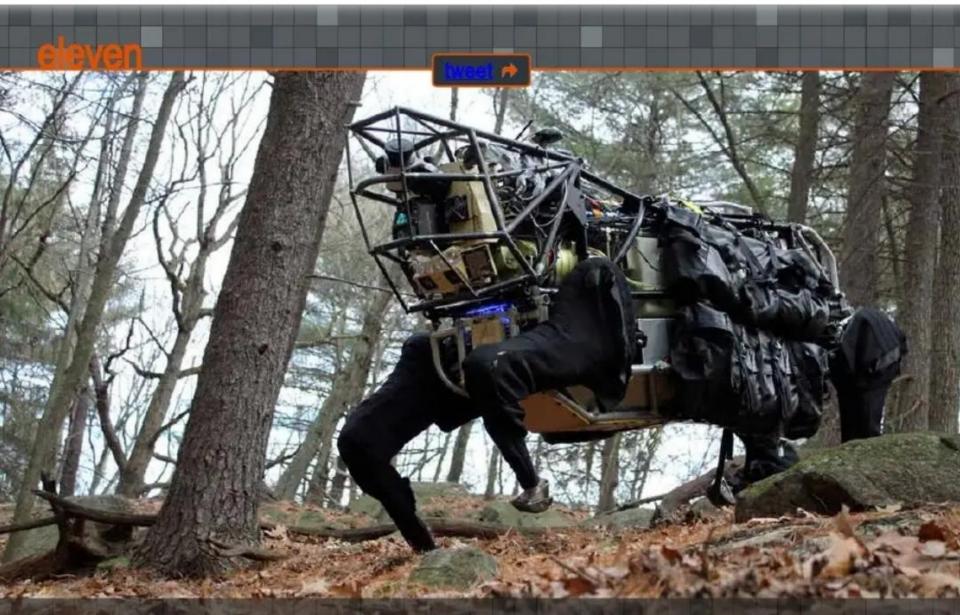




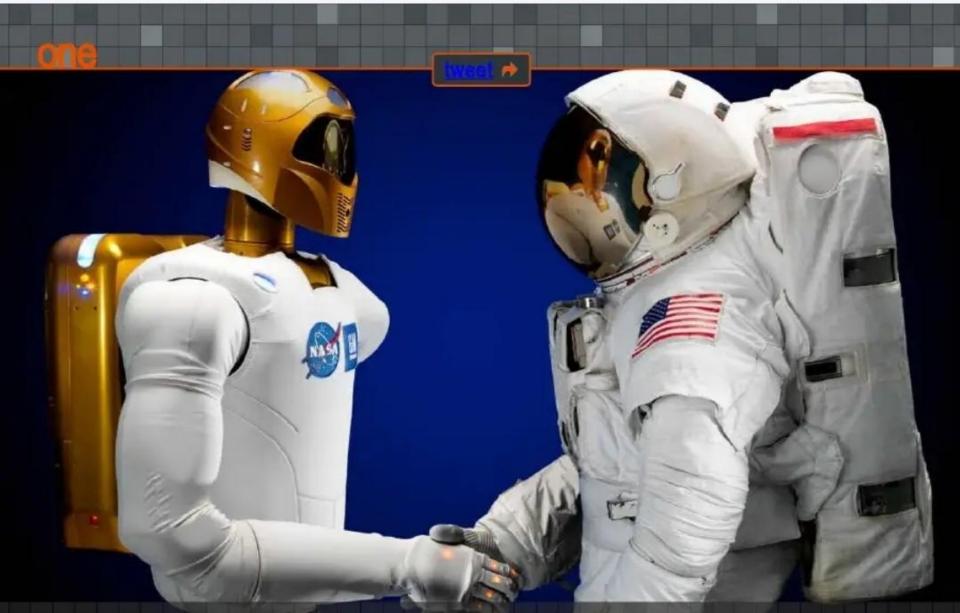
Machines now scrub and mop our floors, like the iRobot Braava.



Tosy's Topio 3 may just replace friends. Engineers programmed this robot to play anyone in ping pong.



US armed forces use quadruped robots to carry up to 400 pounds of supplies, like a pack mule.



NASA's prototype Robonaut2 may be replacing human astronauts in the not too distant future, opening up the option for longer space travel.



Amazon's prototype drones are expected to someday replace today's delivery men and women by flying packages directly to peoples' homes.



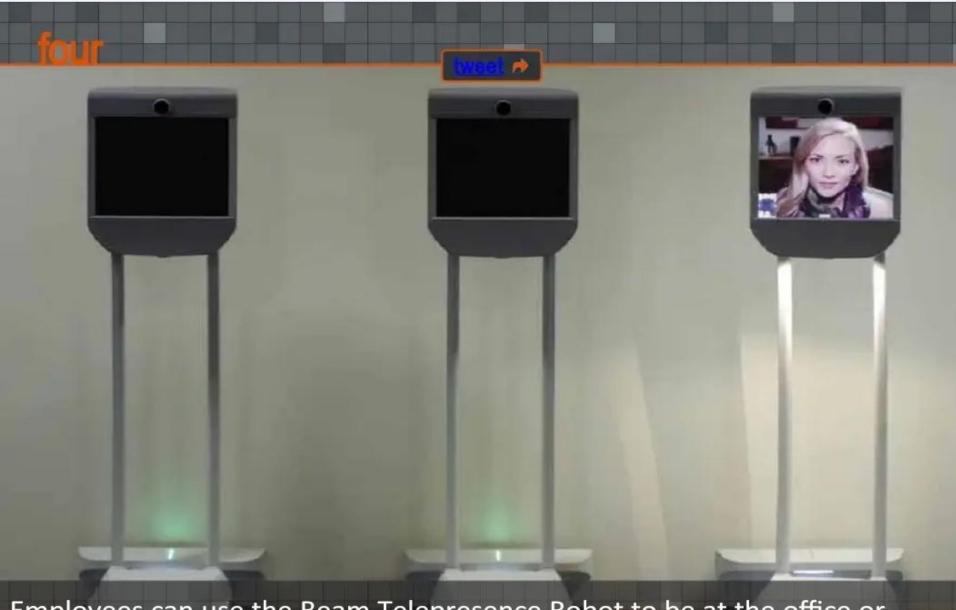
Machines are making warehouses more automated with in motion systems that move, weigh, label, and scan packages on their own.



Honda's ASIMO humanoid robot can walk, conduct music, and even kick a soccer ball like humans can.



Robots are now starting to do laparoscopic surgeries. Minor cuts and injuries are no problem here.



Employees can use the Beam Telepresence Robot to be at the office or in meetings without ever leaving home.





The CubiScan 125 is a small static cubing system that uses a combination of sensing technologies to measure and weigh irregular-shaped parts and components as well as boxed items. Small parts and non-cuboidal items are measured with great precision using infrared sensing technology.



Baxter, from Rethink Robotics, can be trained to the place of low end manufacturing jobs. It uses its camera to see and its arms to grab and move objects.

#### futur

- Lots of people think the world would be full of robots....
- Some believe that Japan has built its humanoid robot fully so far (student version of a robot has gone to school)
- May be we can have a robot which solve the problems between two people and reconcile them)

# What's the Difference?

## a few

not many, some We use A FEW with countable nouns in the plural

We've got a few apples.



## a little

we use A LITTLE with uncountable nouns

We've only got a little money.



