
How close is science fiction . . .

The abilities of computers and how they influence our society is a popular subject in science fiction literature, TV shows, and movies. Robots, which are machines controlled by computers, especially fascinate us. In many stories, humans in the future interact with robots possessing artificial intelligence. *Artificial intelligence* is a computer's ability to think, reason, and respond like a human. Some of these robots become sinister; others are friendly helpers who merely want to be treated like their human companions. In either case, robots develop their own personalities and begin to experience humanlike feelings. Some even look like us humans.

Amazingly, some of these science fiction tales may actually reflect reality far more than we realize. Currently, all industries use some type of robotic technology, whether it's in research, design, assembly, or in all three. The benefit of robots is that they can perform tasks that are too difficult or dangerous for humans. Scientists have already developed computerized humanoid robots that assist people with complex work. For example, NASA scientists have created robots to help astronauts in completing high-precision tasks (see below).

As computer technology becomes increasingly sophisticated, robots, too, will become more intelligent. Decades from now, this technology will surpass any industrial or business application we have today.

We have to wonder: will robots ever be able to think and feel like humans? Do you ever imagine that some day you will be able to talk, work, and play with robots in the same way you interact with your family and friends?

Above: Robots in science fiction stories and images often have humanlike features.

Right: Robotic astronauts called *robonauts* (middle and right) assist a human astronaut (left) assemble a structure at the International Space Station.



. . . to *reality* ?



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