

Robots!

You probably know Star Wars' R2D2 and C3PO aren't real. But do you know what real robots look like and what they can do? **Robots can be many sizes and shapes, and they can perform lots of different tasks.** They monitor pesticide levels in crops and keep modern factories humming. There are even home robots to vacuum dust bunnies and keep swimming pools clean.



Photo Credit: University of Illinois



Photo Credit: P&W

But, robots like these are just the beginning. In the future robots will impact industry and our culture in ways we can hardly begin to imagine.

Some cutting-edge robots **do things you might never expect.** Deep sea robots explore and study depths difficult for humans to withstand. Researchers are developing NurseBots to remind patients to take their medicine and lift them if they fall. Robots even search burning buildings for fire victims. What robot would you develop?

Say Hello to a Robot

Asimo, Honda's human-like robot – one of the most advanced in the world – can say "hello." He also runs, walks, and talks. He avoids obstacles, climbs up and down stairs, and recognizes his own name. Honda hopes Asimo will someday **help people confined to beds or wheelchairs.** For now, he travels the world getting kids excited about science.



Photo Credit: Honda



Photo Credit: Carnegie Mellon

Underground Assistant

Mining has always been a dangerous job. Now a team from Carnegie-Mellon University in Pennsylvania has developed **a robot that can help miners,** keeping humans out of harm's way. Cave Crawler isn't ready for commercial use yet, but it's close. The robot moves on all types of terrain, takes photos, and has sensors to detect dangerous gasses.