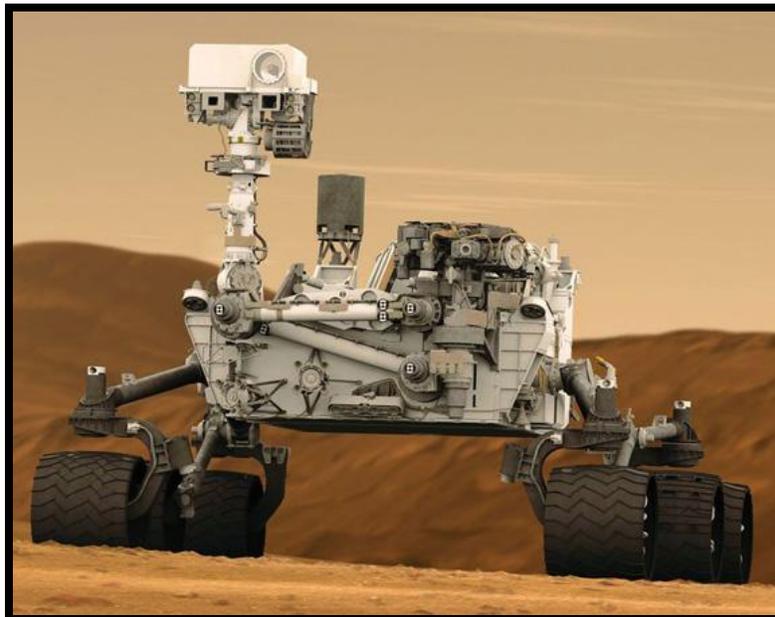


# BOMB ROBOTS



This robot is used by FBI bomb-squads in Oklahoma. It allows access to the bomb without endangering human life as it investigates, moves, and when necessary, disables the bomb.

# NASA CURIOSITY MARS ROVER



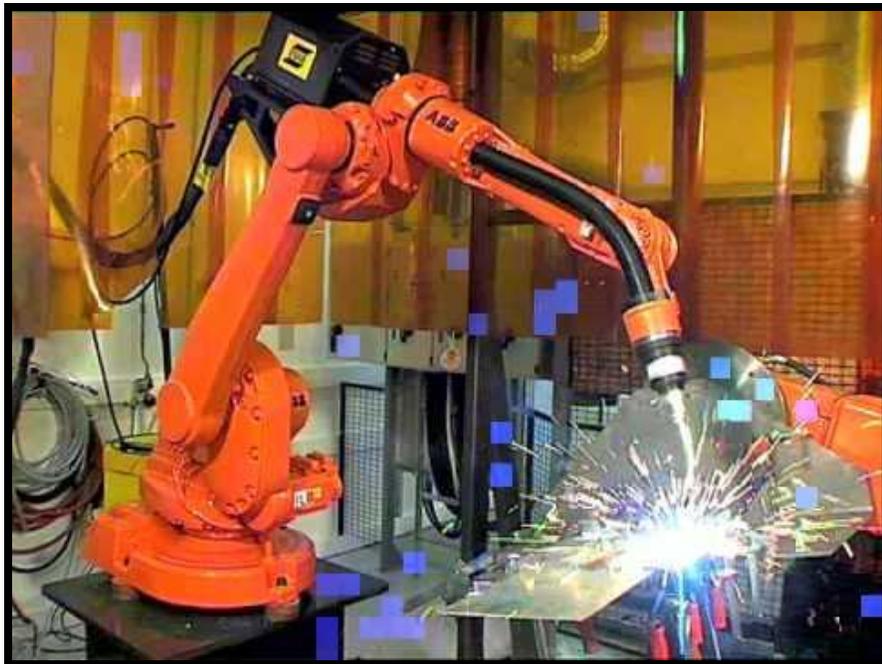
After eight years of research, planning and construction, the NASA space program launched the Curiosity Mars Rover in November. It landed on Mars on the 6<sup>th</sup> of August and is currently collecting data about the habitability, climate and geology of Mars

# ROOMBA



This robot can be programmed to vacuum a room, or a set of rooms, without any need for assistance.

# ARC WELDING ROBOT



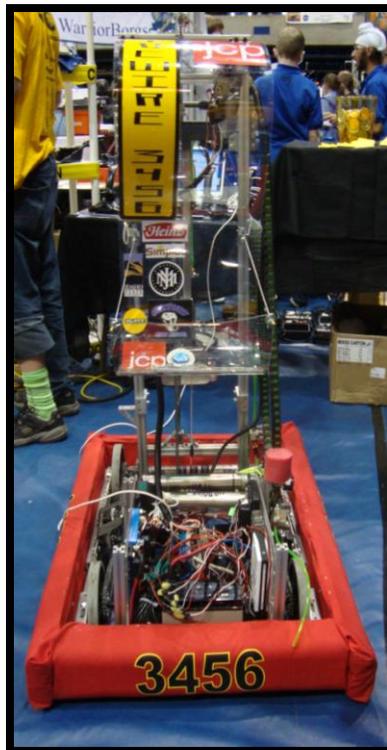
This robot is used for arc welding, a process that uses electricity to melt metal and fuse it together. Good welding technique requires very steady movements, and exposes humans to high temperatures, voltages, and extremely bright light, making it a perfect task for a robot.

# PROSTHETIC LIMB ROBOTS



Robots can be used to replace limbs. Current research is even attempting to fuse nerves allowing the human brain to “feel” touch, temperature and textures.

## *FIRST* FRC ROBOTS



*FIRST* is an international organization that promotes science and technology, through robotics. Every year, thousands of students participate as they design, build and program robots for a unique game. The robot shown above is Venom, created by FRC team 3456 for the 2011 LOGOMOTION® game.

# SURGICAL ROBOTS



Raven is a surgical robot designed by a research program at the University of Washington in Seattle. Robots are making their way into hospitals around the world. Surgical robots allow precision movements, smaller cuts, faster surgeries, and quicker recoveries.

# LEGO® NXT ROBOTS



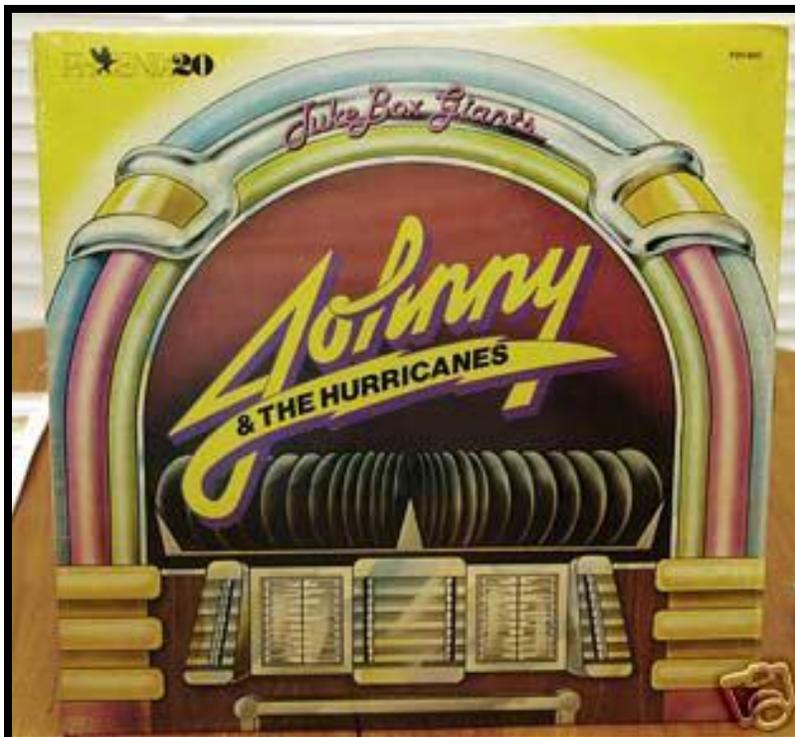
LEGO® NXT kits include motors, a variety of different sensors, wheels, gears, and numerous pieces to incorporate. Your imagination is the limit in constructing different robot designs!

# REMOTE CONTROLLED DEVICES



Devices such as remote controlled vehicles make use of real-time instructions from some sort of control station sent as radio signals. Not limited to cars and trucks, these are commercially available as airplanes, helicopters, submarines and much more.

## JUKE BOX



Now an outdated device, juke boxes were one of the first commonly known automated devices. Originating in the early 1900s, juke boxes played music based on a patron's selection, usually by moving a vinyl album to the player.

# CAR ASSEMBLY



Assembly lines that were once staffed with people are quickly being replaced with hundreds of highly articulated robotic arms, each capable of doing set tasks, lifting heavy pieces, and reproducibly contributing to the finished product.

# GPS GUIDED TRACTOR



While tractors have become technological marvels since engines were first set to wagons in 1901, its GPS (Global Positioning System) that has finally allowed tractors to harvest a field entirely independently of an operator.

# AUTOMATIC CAR WASHES



Automatic car washes have taken the labor out of washing your car. Requiring only the push of a button, a moving track brings the car into place while robotic arms equipped with nozzles and brushes take care of the rest.

# REMOTE OPERATED VEHICLES



Remote Operated Vehicles refers to devices that loosely resemble remote controlled cars, only you don't buy them, you make them. *Stinky* (shown above) was created by four high school students for an underwater challenge requiring sample collection, diving and object retrieval. Many such challenges exist.

# NOODLE SLICERS



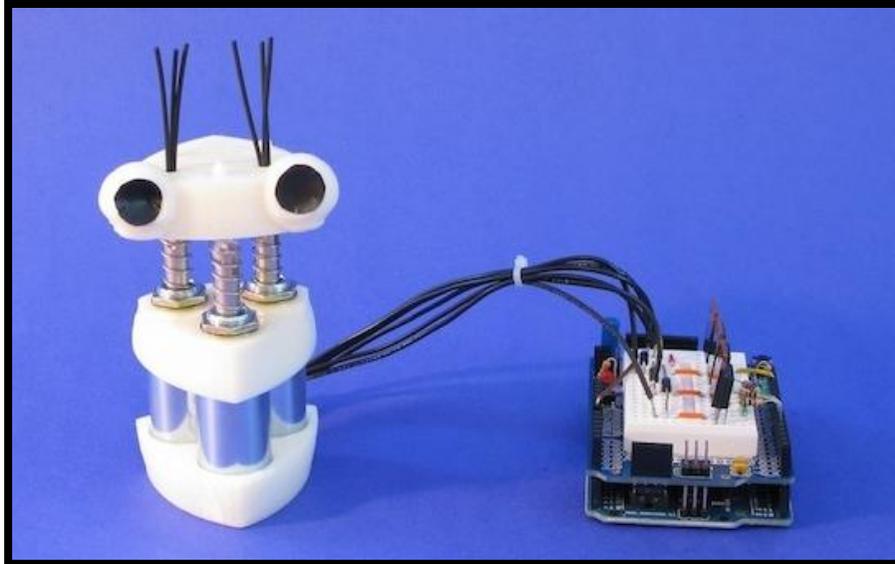
The Robot Chef was invented by Cui Runguan, a restaurateur who couldn't find workers who wanted to slice noodles. He has sold over 3,000 "chef slicers" since he began mass production in March.

# SELF-DRIVING CAR



Self-driving cars allow human passengers to set the destination and then sit back while the robotic car makes use of GPS, radar and other information to drive, navigate around other cars, and even parallel park. Shown above is Junior, a Volkswagen Passat whose autonomous programming was developed by the Stanford Racing Team.

# DANCING ROBOTS



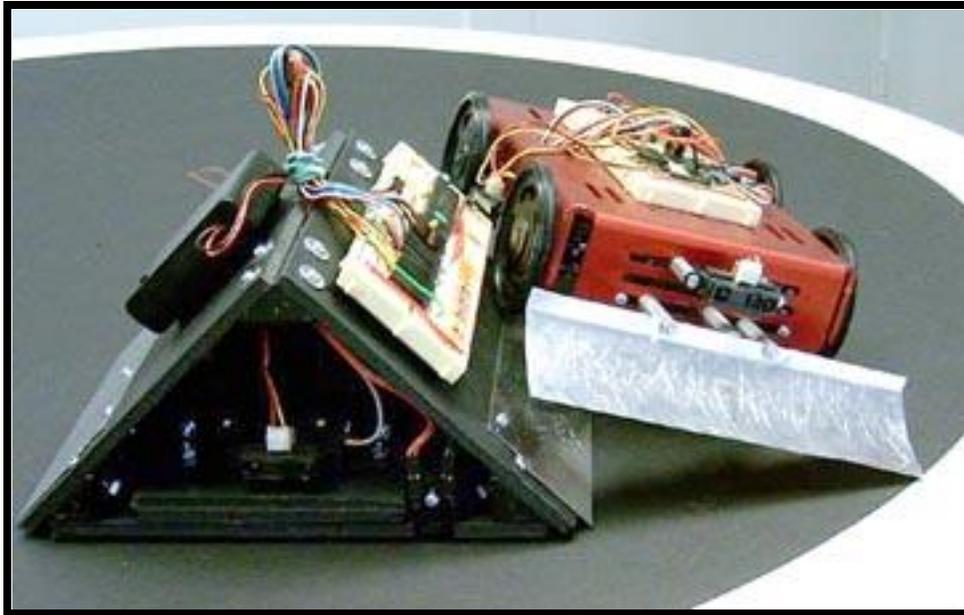
Spazzi is a dancing robot, moving in time with any music you want to play. Made by Beatbots, you can buy the pieces for Spazzi and make your very own dancing robot!

# DUSTCART



In the Italian town of Peccioli the streets are too old and narrow for garbage trucks. Dustcart is the solution! When you send a text message to Dustcart, the trash collecting robot will come to your house and take your garbage!

## FIGHTING ROBOTS



In “Robot-Sumo” the robots have to locate one another, then each robot attempts to push the other out of the ring.

## SPY ROBOTS



Spykee has built in cameras, microphones and motion detectors, and can send information via WiFi, triggering alarms or alerts on your computer.

# ICE CREAM SERVER



Yaskawa-kun, located at a water park in Tokyo, allows kids to select their flavor and toppings then watch as a robot prepares their soft-serve ice cream!

# ROBOT



# CHEFS

These cooking robots have specialties and some are capable of cooking thousands of different recipes!

# GENIBO ROBOT DOG



Robot dogs can recognize their owner's voices, respond when talked to, obey commands, and follow people using motion sensors. Speakers allow the robot dogs to "bark," or even growl at people it doesn't know!