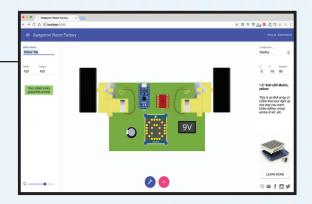
# Gadgetron Robot Factory

### **DESIGN A ROBOT IN MINUTES!**

# • STEP 1 ————

#### **DESIGN ROBOTS ON THE WEB**

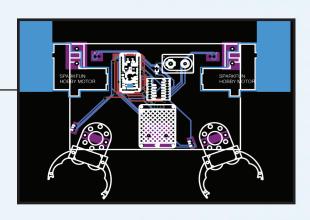
The Robot Factory web tool makes it fun and easy to design simple, Arduino-based robots without any electronics experience. You can select from a menu of parts (e.g., LEDs, motors, servos, buttons, and sensors), and position them using simple drag-and-drop tools. The tool provides feedback about design constraints like microcontroller pin limitations and tracks the cost of your robot.



#### STEP 2

# **ROBOT FACTORY DESIGNS** THE ELECTRONICS

Once your design is complete, the Gadgetron Robot Factory analyzes your design and creates all the design files necessary to manufacture the robot's printed circuit board using an online service like 4PCB.com. It also provides a complete bill of materials so you can order all the parts you'll need from online retailers like Adafruit, Sparkfun, and Digikey.



#### STEP 3

# ASSEMBLE AND PROGRAM THE ROBOT

After you've recieived all the parts, you can assemble your robot using simple soldering skills (all the connections are through-hole). Then, you can program your robot using the Arduino IDE. The Robot Factory provides simple starter code to test your robot and help you get started.



TRY IT YOURSELF: http://robots.gadgetron.build
For more information contact Dr. Steven Swanson (swanson@cs.ucsd.edu)



