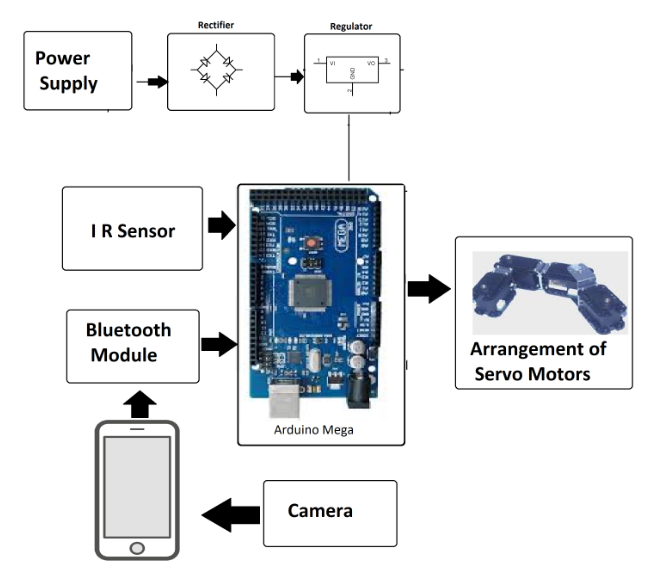
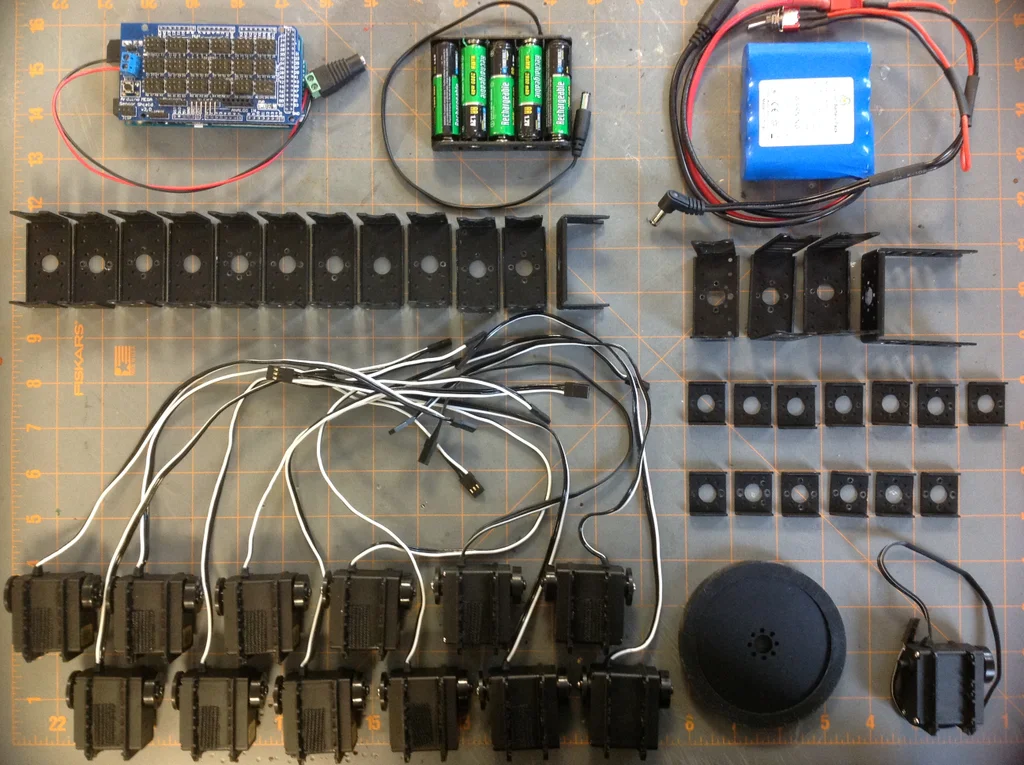
# **Snake Robot**

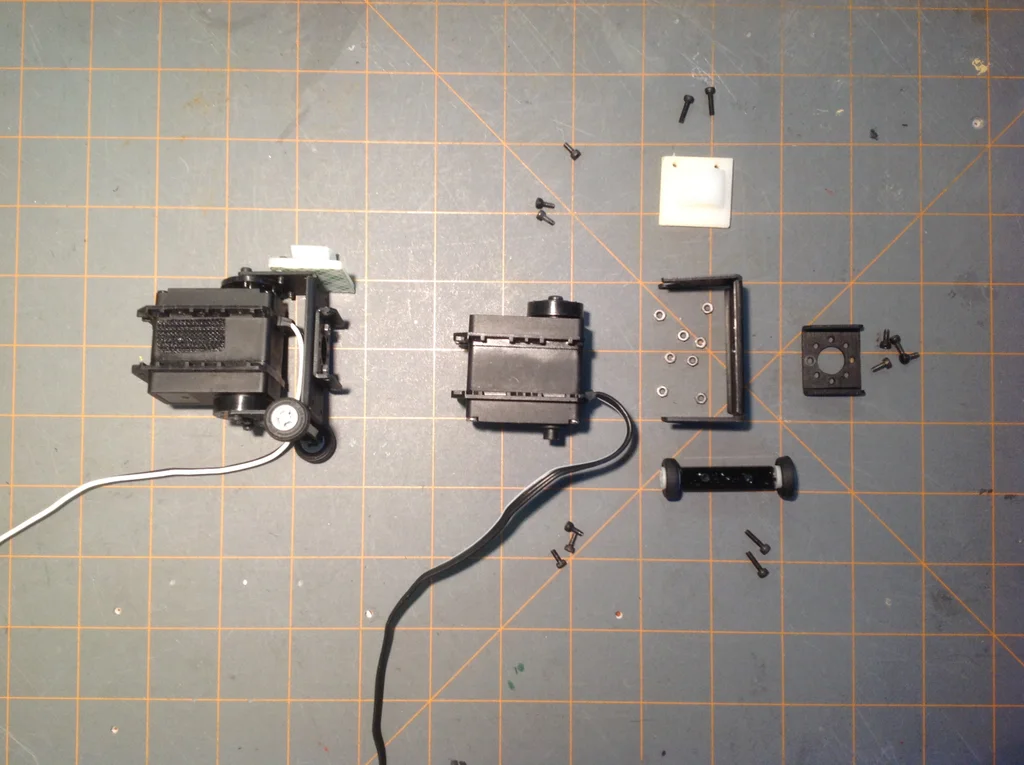
The snake contains 12 segments actuated by servo motors and joined with metal brackets. The servos are controlled by an ESP8266 and powered by a 7.4 volt battery pack. The snake is also capable of autonomous movement. Each of the 12 segments consists of a servo motor, a C-bracket, a side bracket, a wire clip and a set of Lego wheels. Two screw holes need to be drilled into the Lego wheel axle to allow it to be connected to the C-bracket. Remote control is handled through a mobile app.

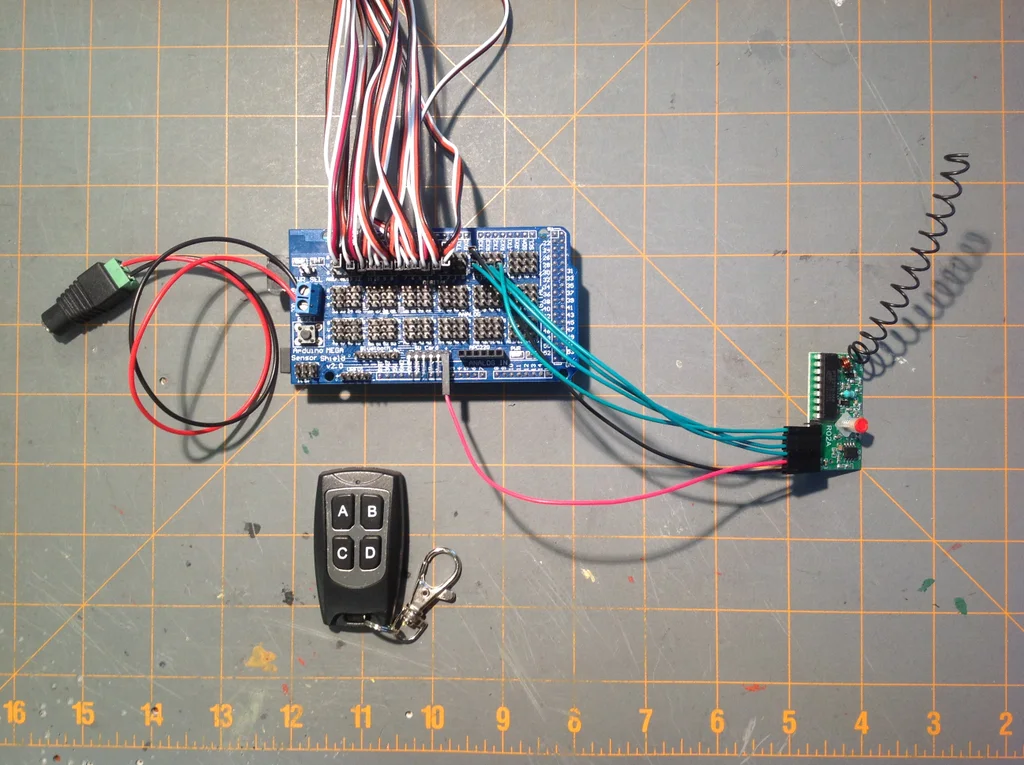
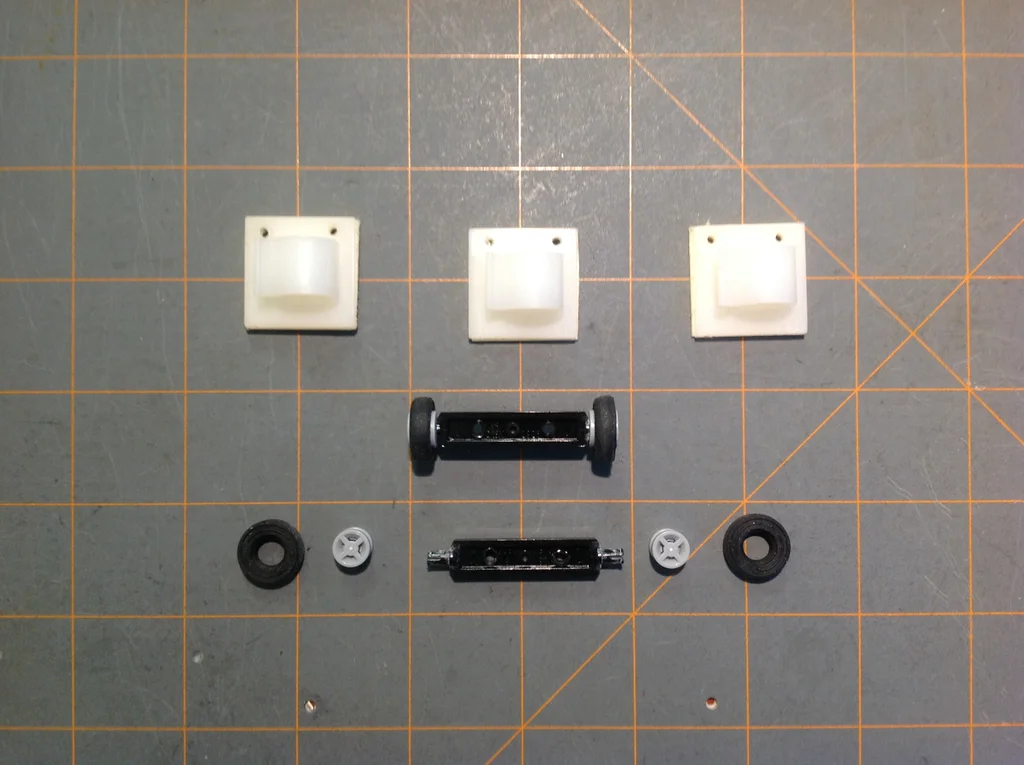
## **Diagram**

![WiFi
](data:image/png;base64,iVBORw0KGgoAAAANSUhEUgAAAAEAAAABCAYAAAAfFcSJAAAADUlEQVR4XmP4//8/AwAI/AL+GwXmLwAAAABJRU5ErkJggg==)

## **Images**







## **Hardware Specification/List of Hardware Required**

* WIFI camera
* ESP8266
* 12 servos
* 12 servo C-brackets
* 12 servo side brackets
* 4 long servo C-brackets
* 1 Lithium Ion Battery
* 12 Lego wheels
* 1 continuous rotation servo
* 1 IR distance sensor and mount
* 1 micro servo and mount
* Several sensor cables and connectors
* 1 large wheel
* 1 5AA battery holder with barrel plug
* Various nuts, bolts, wire clips, and velcro straps

## **Links**

<https://www.instructables.com/Snake-Robot-1/>

<https://www.youtube.com/watch?v=e6Amh1GUPkA>

<https://www.youtube.com/watch?v=L9j52vjhb18>

<https://www.youtube.com/watch?v=pv_MknD6jks&t=1s>