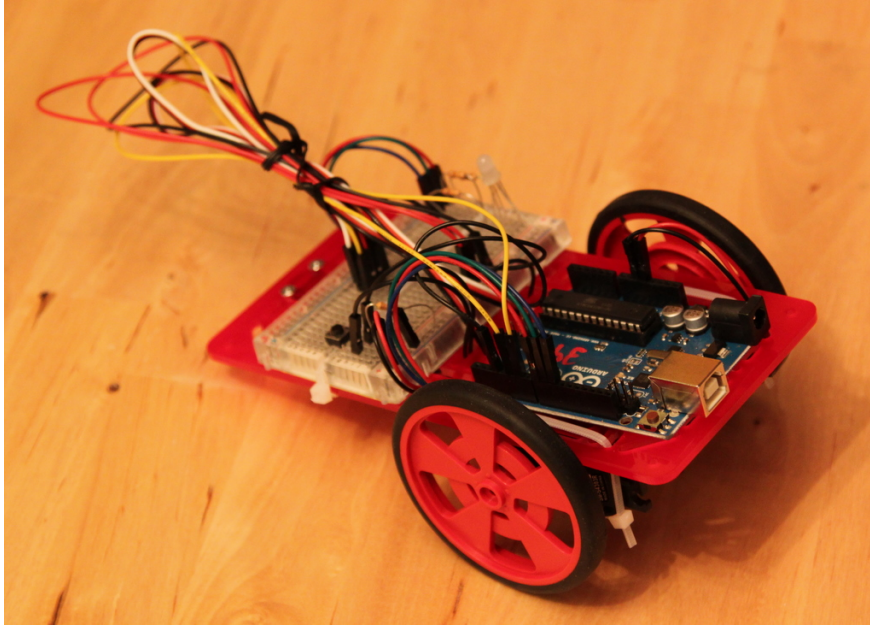


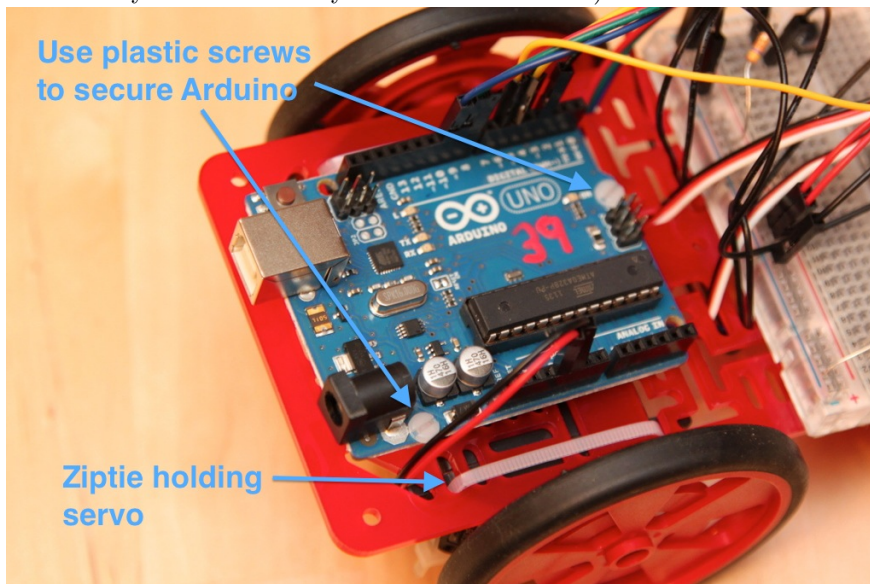
# CSCE 236 Embedded Systems Robot Building Instructions

Carrick Detweiler, Computer Science and Engineering

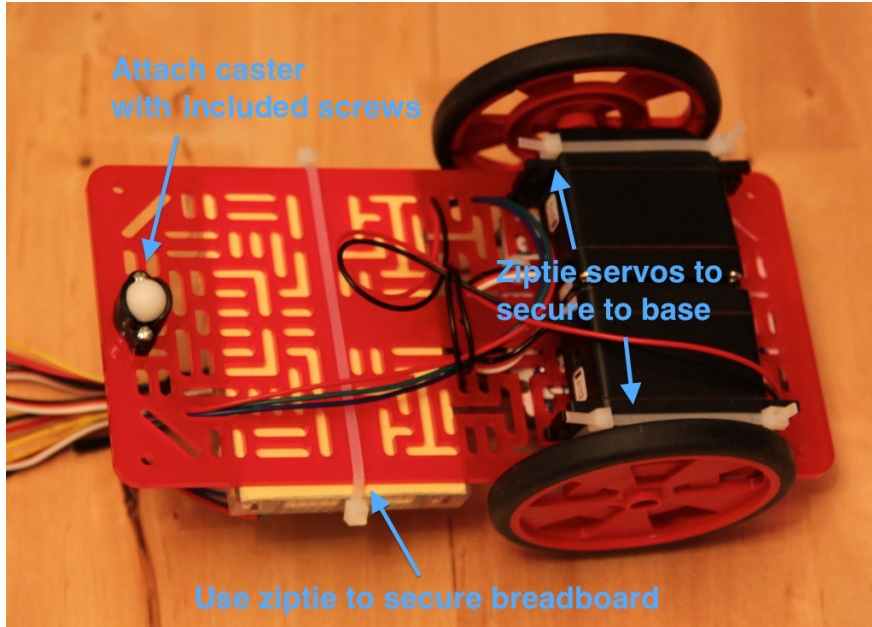
Here are some pictures and basic instructions for building the Arduino-based robot for this course. Below is an image of the final robot. You are free to design your robot differently, however, please avoid doing anything that will damage or permanently modify the components (e.g. do not use glue, don't use the double sided tape on the bottom of the breadboard, etc).



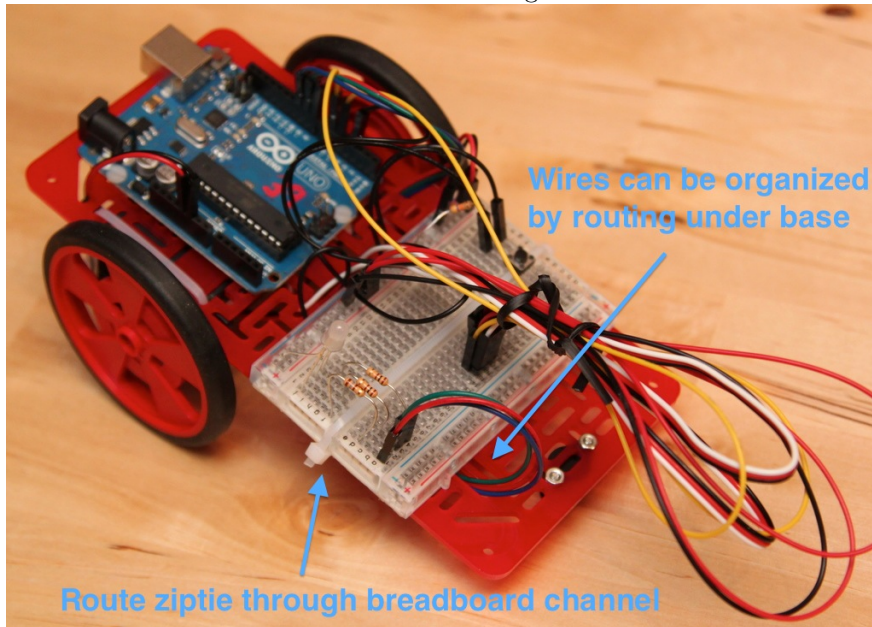
Use the two plastic screws to secure the Arduino to the base. You will have to find holes that align properly, although the Arduino will likely end up at a slight angle. Then secure the servos by using a ziptie on each servo (you should check alignment and placement of all parts before putting the zipties through, since once you attach them you cannot undo them).



Here is a view of the robot from the bottom. One key to securing the servos is making sure that the backs of the servos are touching and that the zipties are on the wheel sides of the servo flanges. You should attach the caster at the back of the robot. Insert the spacers to lift the back of the robot up slightly higher.



Use another zip tie to secure the breadboard to the base. Once you have completed assembly, you can route some wires under the base to better organize them.



Your goal should be to make your robot look better than mine. And feel free to innovate!