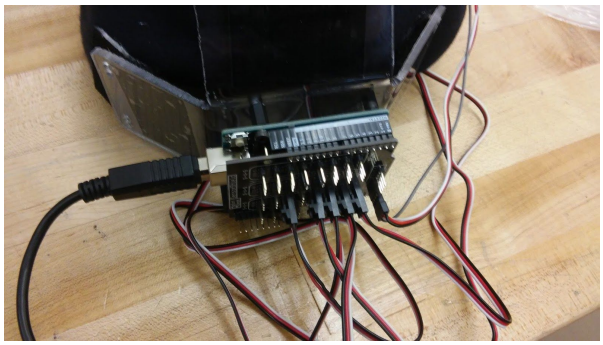
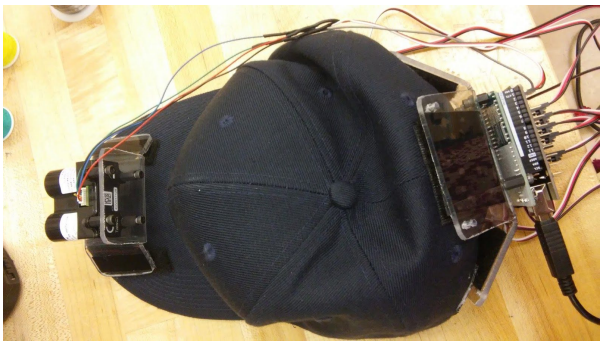
Haptic awareness device

One of our projects this year was designing a second type of Haptic Awareness Device. This one is designed to be lighter and easier to wear.


The device is a Lidar light wired to an arduino that is connected to vibrating motors. The hat is programmed to vibrate when the lidar light senses an object. This is designed to help visually impaired people navigate easier.The Hat took about three weeks to program and it took about a week to fully assemble.To assemble the hat we created a polycarb sensor holder for the front and the back of the hat. We then used adhesive to attach velcro to the hat and to the sensor holder. We created a felt pocket that holds all of the vibrating motors. The wires from the Lidar light, Arduino and motors are connected together, then attached to a battery and off on switch. We then programmed the hat to detect an object in front of it and the motors vibrate depending on the distance of that object.

Created by:
Ali Short
Mathew Shipley
Tristan Boyle
AJ Diamond
Ethan Lang
Programmed by:
Tristen Klein
Austin Hauter
Documentation by: Ali Short 5/24/17