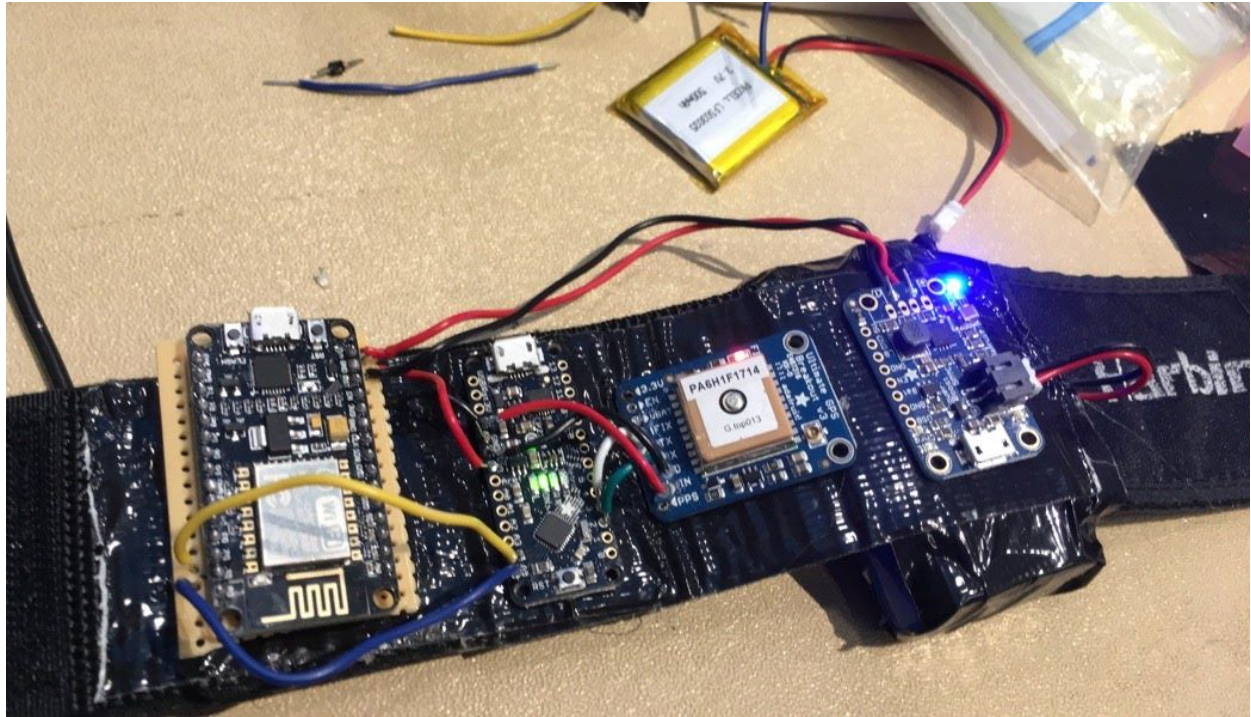


limband

BigRed\\Hacks Fall 2017



Documentation of this project was not great, but here's a photo of our project's hardware. The black band was the wearable that used velcro to secure around a user limb, hence limb-band = limband.

The boards from left to right are:

NodeMCU/ESP8266

- > create Wi-fi access point, host website to collect user data
- > communicate with MetroMini to obtain GPS data

Adafruit MetroMini

- > connect Ultimate GPS with the NodeMCU
(did this because the software libraries were incompatible)

Adafruit Ultimate GPS

- > track user location, which is used to calculate speed and distance

BoostConverter

- > boost 3.7V battery to 5V

Unpictured is the NeoPixel strip we connected to the band to use as a workout display. We programmed the NeoPixel to display multiple sequences to convey different information to the user throughout the workout.