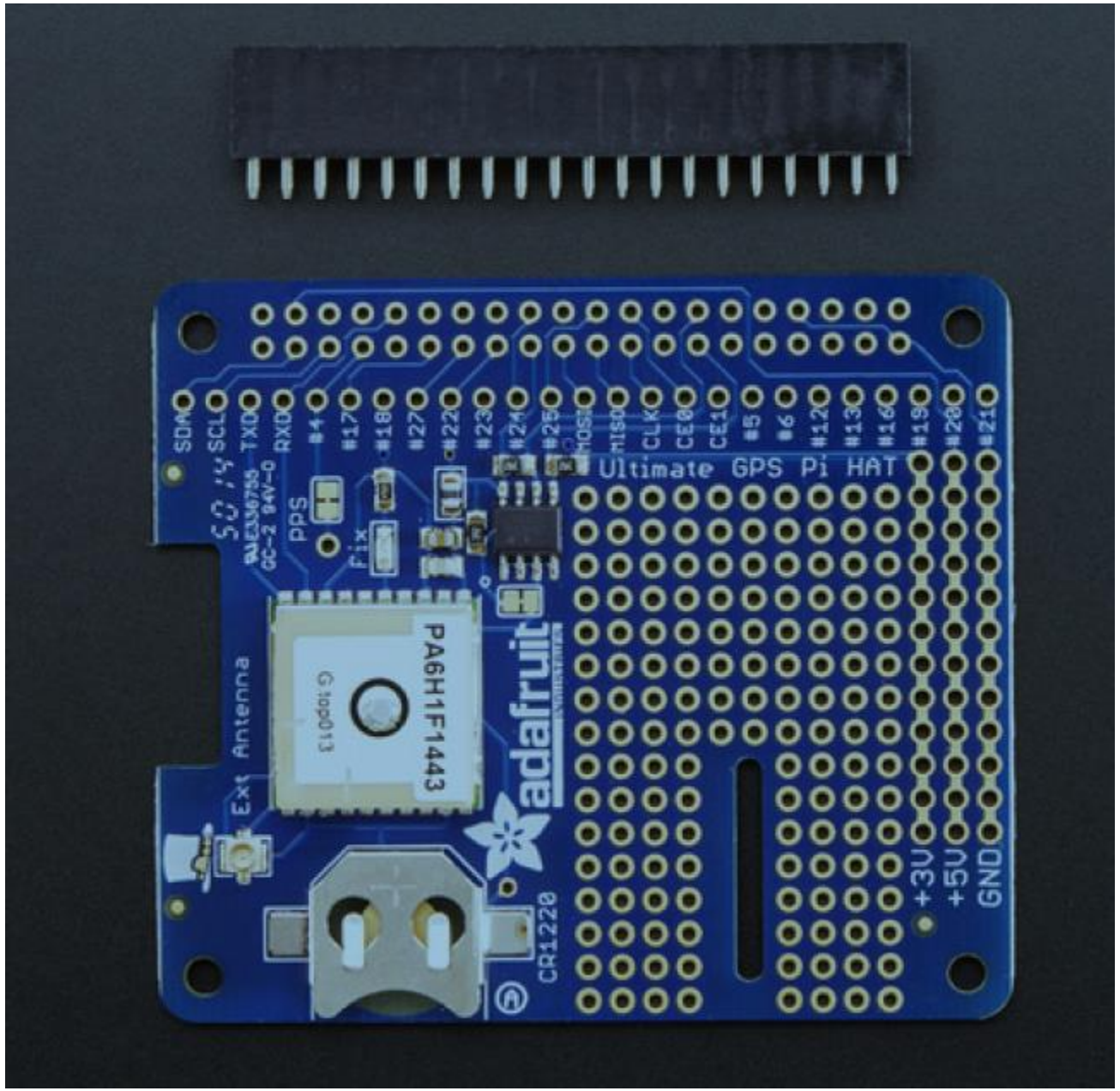
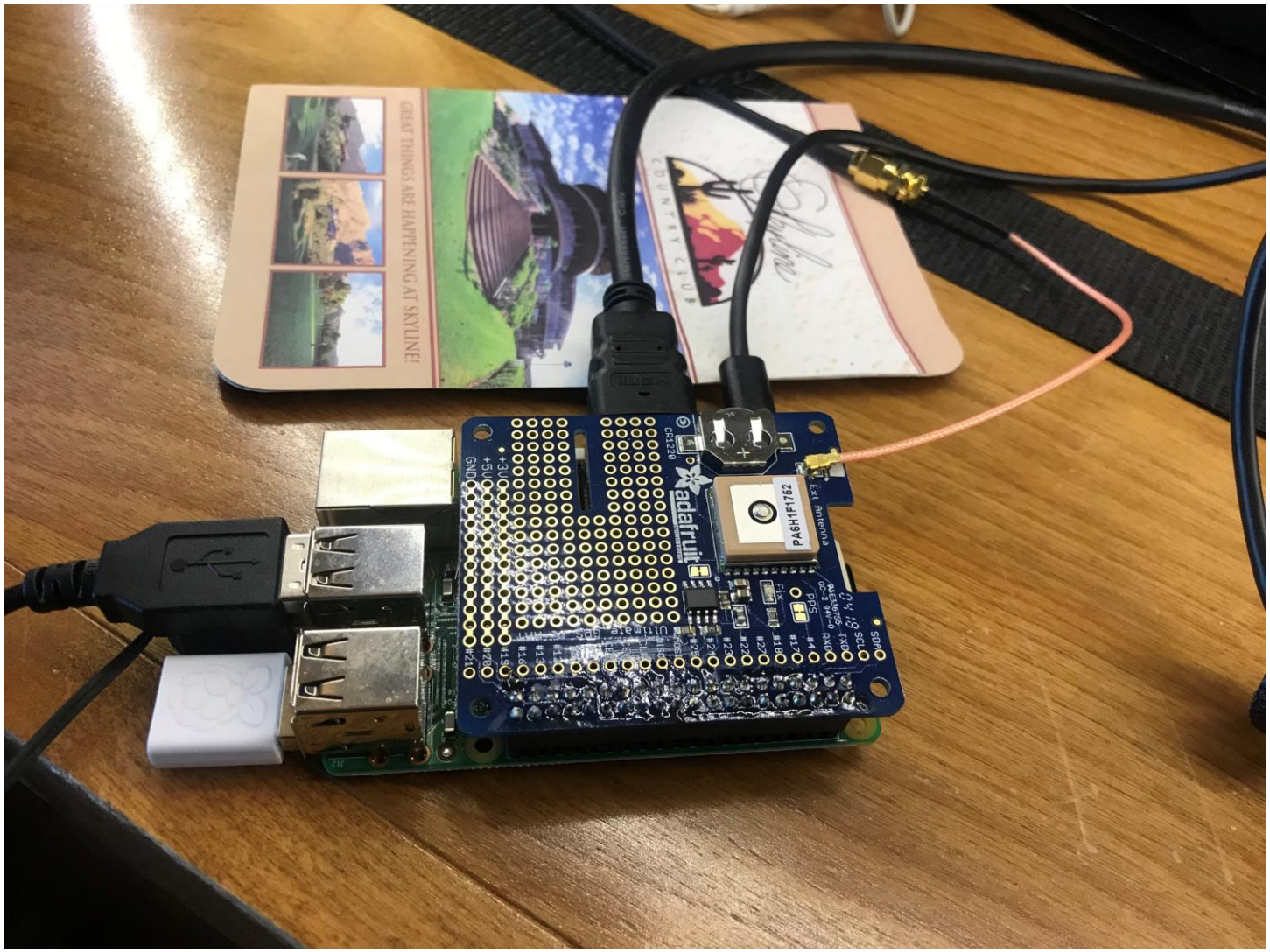
Golfy McGpsFace

GPS-based distance calculator



- Solder the GPIO header to the bottom side of the circuit board.

- This allows you to plug the GPS hat onto the top of the RPI with the boards matching up



- This image shows the GPS hat plugged onto the RPI
- It also shows that I used the external antenna extender (orange colored cable at top right of board in picture
- There is also an HDMI monitor connection, USB keyboard and USB mouse
- Since it is a Raspberry Pi 2, there was also the need for a USB WIFI device

Parts List

Purchased from Adafruit web-site

- CR1220 12mm Diameter – 3V Lithium coin cell battery
- GPS Antenna – External Active Antenna - 3-5V 28dB, 5 meter
- SMA to uFL/u.FL/IPX/IPEX RF Adapter Cable
- Adafruit Ultimate GPS HAT for Raspberry Pi 2
- GPIO Header for Raspberry Pi HAT - 2x20 Short Female Header

Miscellaneous parts

- Raspberry Pi 2
- USB keyboard
- USB mouse
- USB Wifi dongle (compatible with Windows IoT)

App Notes

- The entire application, including Windows IoT core, crashed often in early development.
- Internet research lead to not providing enough power to the RPI and GPS HAT.
- Needed replace the default power supply that comes with the RPI2 with one that provided more amperage.
- Not sure the amperage need but used an externally powered USB device with up to 8 amps. I would guess it needs around 2.5 amps.
- Even with more power, the build crashes periodically and was unable to fully debug the root cause.
- I think it is related to the generation RPI that I am using. I cannot get a recent build of the Windows IoT core to boot. This is why an older build is used here (14393)