* We now have a definitive direction of the project (working with Gesture ML bin file, and the hand will be ~1 foot away from the radar).

**Questions for Nick and Software Engineer:**

* Do I need to use the DCA1000 for the raw data output? Or the UART output from mmWave? **NO**
  + <https://e2e.ti.com/support/sensors-group/sensors/f/sensors-forum/1234274/iwr6843-read-the-uart-data-iwr6843>
* What exactly is being outputted through the UART data port? Raw radar data or flashed bin radar output data? The radar is flashed with the bin file, and then I have a script in python that outputs the live data.

<https://dev.ti.com/tirex/explore/node?a=1AslXXD__1.00.01.07&node=A__ADnbI7zK9bSRgZqeAxprvQ__radar_toolbox__1AslXXD__1.00.01.07>

* Am I going to modify the bin file that flashes the radar?
  + There is the bin file and its associated code, and then the visualizer and its associated code. Does the radar already output its gesture predictions and then the visualizer decodes and displays the results?

On the CONFIG port, outputting a string character of the detected gesture

If we wanted to add new gestures and have them run on the 6843, then yes. Otherwise, can do it offline

Could use the information from features potentially to get location of hand in relation to radar (weighted angular features),

Anything moving really slow is not included in feature generation (if hand is sitting there in front of radar, or off to the right, it will not impact the angfular weighted feature as much as it would if it was moving)

May have to make some small changes in the demo code, so that even if …

OOB - Point Cloud (multiple points, even for just arm)

-Average position velocity data for multiple points

TWO RADARS?

Use OOB Demo (fine tune for close distance)

ML Gesture

Hex Data: 5071c50108f5f8010080c9010871c50108

Header

0201040306050807 00000603 c0000000 43680a00 99000000 610b0243 00000000 03000000 00000000

TLV Header

1a040000 28000000

Features TLV

a86fe2c0 2a940b42 9c8431c1 17238240 00008242 cf40b840 642b04bf 7261a3be 78df9040 092cd141

TLV Header

1b040000 28000000

Features TLV

e2614d36 43b46e31 3b106f30 f4520831 07af4632 0ea3f635 74ad0d37 b4a3c932 d93dd534 18ff7f3f

TLV Header

06000000 18000000

Stats TLV

fa1400005f080000820f000000000000000000004b000000

Padding? Ignore

0100000000000a

Hex Data: 5071c50108f5f8010080c9010871c50108

020104030605080700000603c000000043680a