#### SMALL \_ARTIFACTS LAB:

# Design and 3D print a radar fixture

### Abstract

In this assignment, you will practice on reading data from an IMU. The IMU we use is the MPU9250.

## **Description**

- 1. You will read all the XYZ Accelerometer Data and print them out **in a meaningful way** (i.e., in g).
- 2. You will read all XYZ Gyro Data, print the raw value.
- 3. Move the IMU along each axis with acceleration, observe how the data looks like. You can use Serial plotter for observation. You do not to have print all data at once. Instead, you can define some keyboard input to turn on/off certain data if it's easier to understand the data.
- 4. Send us a video link of the experiment.

These two documents will be useful for this assignment: MPU9250 Datasheet; MPU9250 Register Map.

### **Delivery**

There are two deliverables and one optional submission.

- First, your code. You can put them in a zip file if needed.
- Second, a quick video demo of your experiment.

### **Due Date**

Wed Oct 19th, 11:59 PM EST