**SM**ALL
**_ART**IFACTS
**LAB;**

## IMU+ I2C

### Abstract

In this assignment, you will practice on reading data from an IMU MPU 9250.

### 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 and observe how the data looks. You can use a plotter for visualization. You don't need to print all the data at once. Instead, you can define keyboard inputs to toggle certain data on or off to make it easier to understand.

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 23th, 11:59 PM EST**

Last Modified Date: Oct 14th, 2024