

PROBLEM STATEMENT OF EXPERIMENT 4

June 1, 2020

As we have observed in experiment 3 that gyroscope is having drift over time and accelerometer estimated angle is very noisy, therefor to tackle this drawbacks design an algorithm to combine both the data and to get accurate estimation of angle around x axis.

Task 1: Design the algorithm and explain it logically

Task 2 : Modify the function 'data_fusion()' in the file 'mpu_reading_data.ino'.

Task 3: Compare all three data (gyro, accel, fused) and tune your algorithm if required