CpE301 - Design Assignment 6 DUE: See Website

Design Assignment 6
The goal of the assignment is to develop the above code to do the following:

1. Interface the provided MPU-6050 6-DOF IMU Sensor to the ATmega328p using the I2C interface. Using the earlier developed code for UART, display the accelerometer and gyro data to the UART Terminal. Extra credits for 1) visualizing the accelerometer and gyro values (10 points), and 2) Apply Kalman Filtering on at least one sensor data and display the filtered value.

Submission:

The following are required for successful completion of the design assignment:
   a. AVR C code that has been compiled and working.
   b. The C code should be well documented with explanation of every instruction.
   c. A word document that contains the flow chart of the assembly code along with the snapshots of the schematics, components connected on the breadboard and screenshots.
   d. Specify your assignment partner's name on the submission doc.

Points:
Task 1: 100%. (Code=60%, Documentation=20%, Verification/Snapshots=20%)

Evaluation Rubrics:
See class website for the DA evaluation rubrics.