Testing – Test Plan

* System Tests
  + Software:
    - Test Input data. Send test data equivalent to the sensor data. Confirm that data was received and compare with test input data.
    - Test sensor input data conversion. Send input test data. Allow conversion to pulse width modulation values. Compare with expected pulse width modulation values.
    - Test output data. Send output data. Was output data sent and was that data equivalent to the data given.
  + Hardware:
    - Test 12V wall wart to ensure the 12V DC is the proper output.
    - Test voltage regulator from 12V DC to 5V DC with oscilloscope.
    - Test ultrasonic range module input and output signals using function generator and oscilloscope.
    - Test processor inputs and outputs using oscilloscope and function generator.
    - Test Led array range of illumination using power supply.







