CVEN 6301: Sensors for Civil Engineers

Final Project
Due Aug 3rd in Class

In the final project you will demonstrate 2 things:

1. Calibration and Hypothesis Testing
2. Communication between Arduino's

In the first part of the project you will connect a photo-resistor and DHT11 sensor to your Arduino. You will evaluate whether the Photoresistor value read (voltage) is a function of temperature. You will write a Null and Alternative hypothesis for the above statement and conduct a small experiment to test it.

You will describe your experiment, hypothesis and how you tested your hypothesis (experimental design) as part of your presentation/demonstration.

In the second part of the project you will connect this Arduino (with the photoresistor connected in Step 1 – Let us call this Arduino the Peripheral) to another Arduino (let us call this the control) (your choice of how you want to do it). You will connect a DHT11 sensor and a photo resistor to the control Arduino as well. You will collect data from both Arduino's and make plots using PySerial library.