Members in Attendance
- Nathan Truong
- Felix Moss
- Annika Boyd
- Eisa Alsharifi

Agenda
- PCB Testing

Notes
- Having problems with PCB virtual ground
    - Our voltage is only hitting ~3.2V and not the expected 4.5V
    - Ran several test cases to try and decipher the problem
        - Discovered that our voltage divider may be incorrectly stepping the voltage down, since we are getting around ~3.2V of output
        - We spent time testing every individual trace/connection on the PCB
        - Discovered that the input to the buffer was 3.2V and the output was 1.7V, when the output should be equal to the input plus about 200mV
        - Decided to change out the resistors to see if they were possible defective
            - No change after this
        - Buffer was tested individually and the problem was discovered
            - Buffer was not getting enough input voltage so it was messing up the output of the voltage divider
            - Output seems to be stuck near one of the rails
            - The buffer is failing to operate properly because of the low input voltage, we need it to be higher, ideally around 4.5V to 6V
            - Going to test a new buffer by itself
                - Buffer by itself works
    - Circuit works!
- Will solder faraday tube to PCB on thursday
- For demo, be able to change gain via commands to the API
- Convert analog values to actual voltage to match voltage readings
- We also changed our voltage regulator values to R1 = 10k and R2 = 9.5k in order to output a voltage between 4.6V and 4.7V for the input to the buffer, which makes the output buffer voltage 0.2V higher (4.9V), which makes the output of the microcontroller 0.2V higher (5.1V)