

Members in Attendance

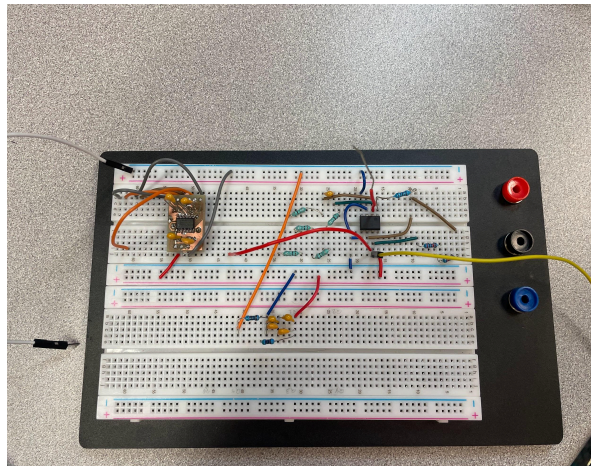
- Josh Mendex (Sponsor/Advisor)
- Nathan Truong
- Felix Moss
- Annika Boyd
- Eisa Alsharifi

Agenda

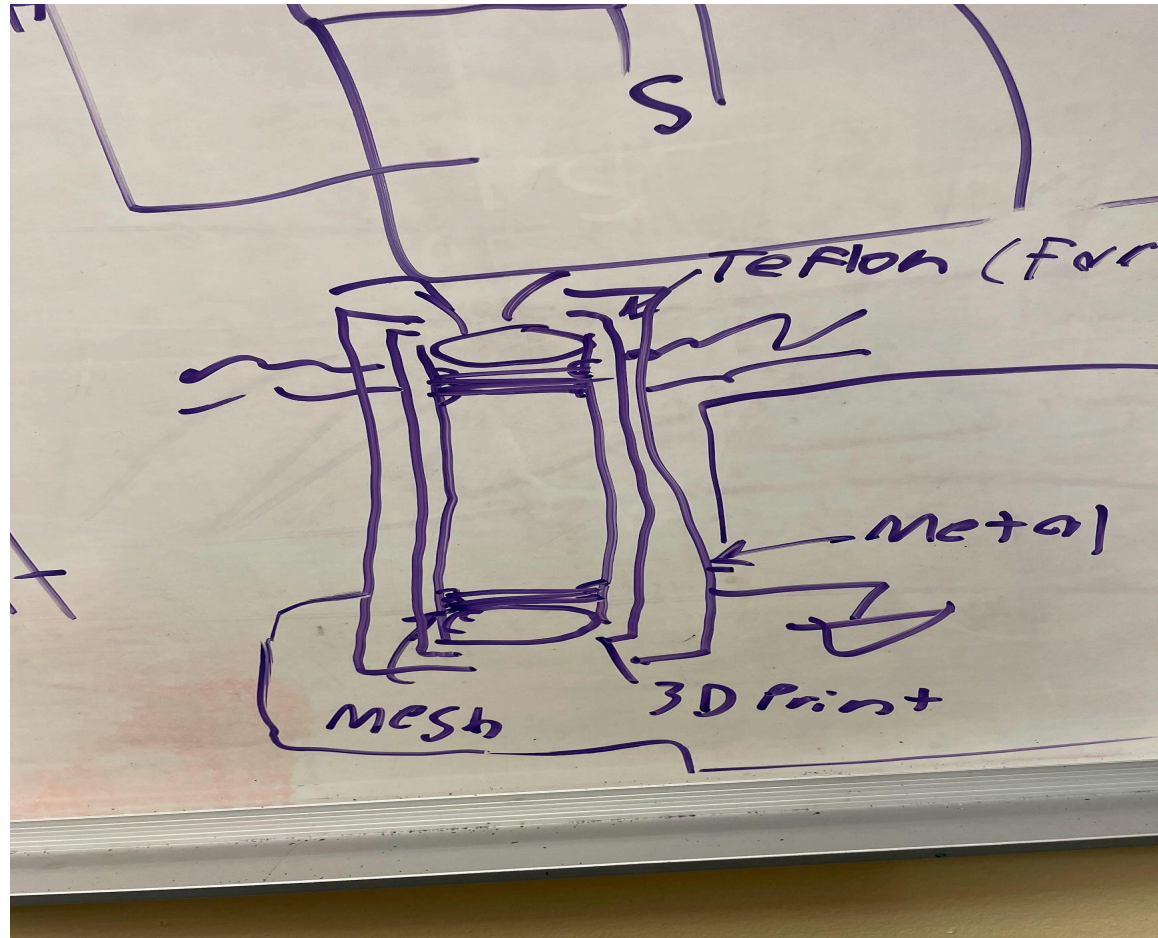
- PCB Updates
- Planning work for coding, pcb testing, and extended documentation
- Josh questions

Notes

- All connections on PCB are correctly routed
 - Testing took Nathan (3 hours)
- Coding for the ESP32 done by Eisa over spring break (4 hours)
 - Looked at drivers needed, unable to get the QT working on the prototype breadboard circuit



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- Was unable to get it working
- Discovered solution with josh for programming the QTPI-ESP32-S3:
 - This board is a cheaper more streamlined version of the full esp32
 - Hit reset until purple light is on, then click it again to enter programming mode
- Discussed what exactly the tube and faraday cage and metal shielding would look like



Deliverables

- Haven't tried coding MAX1032, spend next week talking to the max
 - Try coding in circuit python Eisa (3 hours)
- Try to put a very small current source into the pcb to see how output compares to LTspice
 - Nathan (3 hours)
- Begin creation of user guide, developer guide, and test plans
- Bring shrink wrap for wires Felix
- Josh questions
 - How does the electric field for the mesh work? Why do we need it? Why can't we just use wires? How many electrode wires.
 - How are we going to detect size since charge and size are not correlated? Do we need a different sensor?
 - Can we change SMD caps to through-hole?
 - What does the faraday cup look like? Is it the tube itself? A cover for the tube?