



BITNG LAB UPDATE

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Date 3/04/2021

Outline

- Progress to date
- Path forward

PROGRESS TO DATE

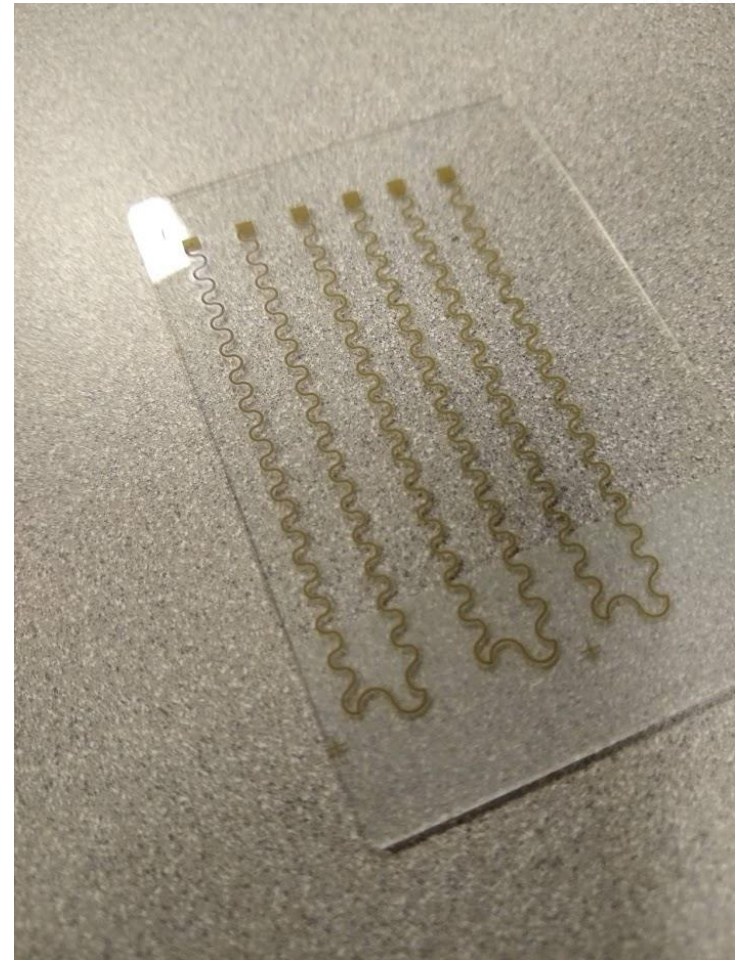
Progress from last week

- Shriner's project
 - Strain gauge
 - Firmware
 - Literature review

SHRINER'S PROJECT

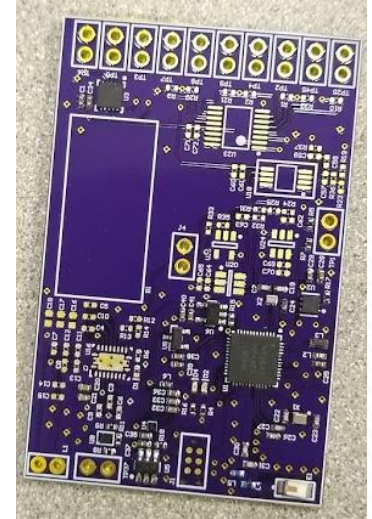
Strain Sensor: Round #7

- PDMA: Finished
- PI: Finished
- AG NW: Finished
- Conductivity Test: ~600 ohms
- ECO-FLEX: TO-DO
- ASSEMBLY: TO-DO
- ENCAPSULATION: TO-DO
- Characterization: TO-DO
- Conclusions
 - Less AgNW passes
 - (5 vertical passes to 3)
 - Wider/Thicker PI layers
- Next steps
 - Reduce AgNW width
 - (4 horizontal passes to 2)
 - Increase sensitivity
- Lab Session: Friday 3/05



Firmware Development

- Drivers complete
- Pressure Sensor:
 - Calibrate Jihoon's pressure sensors once done
- Flex PCB:
 - ~~Parts ordered from Digikey~~
 - ~~PCBMinions order for Flex PCBs~~
- ~~Secure DFU OTA~~
 - ~~Over-the-air Bluetooth firmware update~~



Literature review

- ~~Figures and Tables~~
- ~~Adding sources to EndNote X9~~
- Requesting permission to reuse image
 - Academic sources: 1/19 pending – need to be purchased: Diamond
 - ~~Commercial sources: Completed~~
 - ~~DIY sources: Completed~~
- ~~Introduction~~
- Body Paragraphs
 - ~~Summary~~
 - ~~Applications~~
 - ~~Commercial~~
 - ~~DIY~~
 - Academic Summary
 - Pressure-IN PROGRESS
 - Temperature-IN PROGRESS
 - Strain-IN PROGRESS
- ~~Conclusion~~

PATH FORWARD

Path forward (3/01/21 – 3/08/21)

- Shriner's Project:
 - Literature review
 - Body paragraphs
 - Strain gauge, round #7
- Firmware development
 - ~~Pressure sensor~~
 - LP-ECG power consumption

APPENDIX