



BITNG LAB UPDATE

Carl Demolder

Date 2/15/2021

Outline

- Progress to date
- Path forward

PROGRESS TO DATE

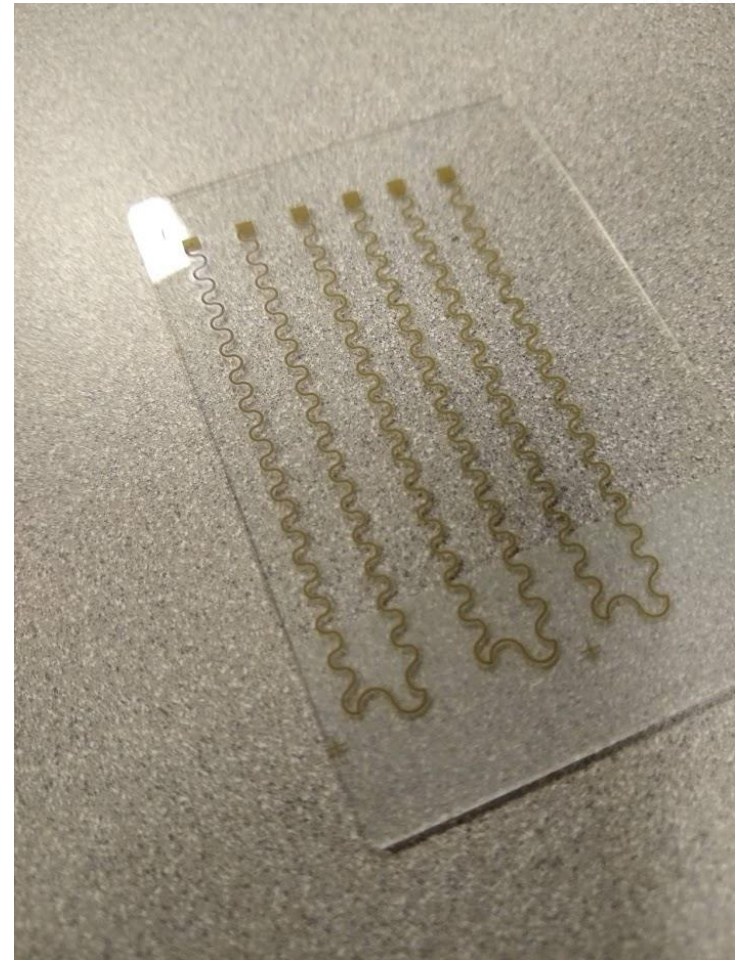
Progress from last week

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

SHRINER'S PROJECT

Strain Sensor: Round #6

- PDMA: Finished
 - PI: Finished
 - AG NW: TO-DO
 - Conductivity Test: TO-DO
 - PDMS: TO-DO
 - ASSEMBLY: TO-DO
 - ENCAPSULATION: TO-DO
 - Characterization: TO-DO
 - Conclusion: Not enough nano-wires
 - Going to refresh nanowires in vial every 15 minutes
-
- Lab Session: Friday 2/19

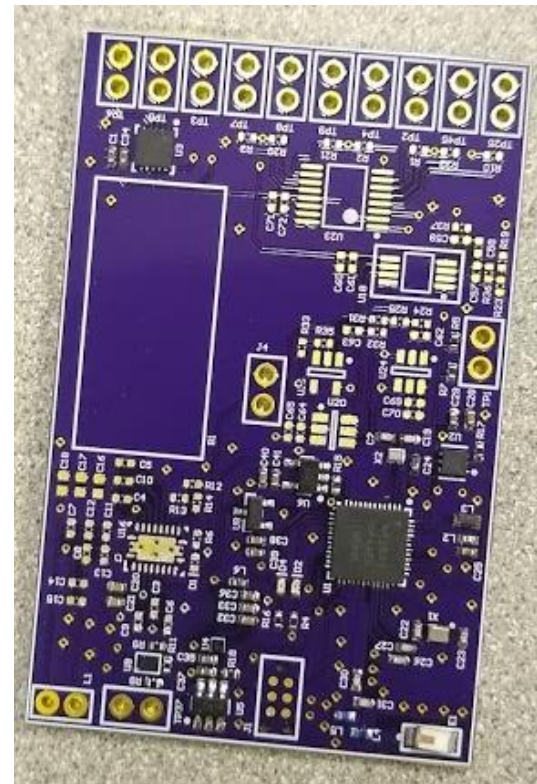


Literature review

- ~~Captions to 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: 3/15 pending~~
 - ~~DIY sources: Completed~~
- ~~Introduction~~
- Body Paragraphs
 - ~~Summary~~
 - ~~Applications~~
 - ~~Commercial~~
 - ~~DIY~~
 - ~~Academic Summary~~
 - Pressure-IN PROGRESS
 - Temperature-IN PROGRESS
 - Strain-IN PROGRESS
- ~~Conclusion~~

Firmware Development

- Drivers complete
- Testing & Debugging: to-do
- Test with pressure sensors: to-do



PATH FORWARD

Path forward (2/15/21 – 2/22/21)

- Shriner's Project:
 - Literature review
 - Strain gauge, round #6
- Firmware development
 - FDC1004 (4-Channel Capacitance-Digital Converter)
 - IN PROGRESS (90% Complete)

APPENDIX