



# BITNG LAB UPDATE

Carl Demolder

Date 2/18/2021

# Outline

- Progress to date
- Path forward

# PROGRESS TO DATE

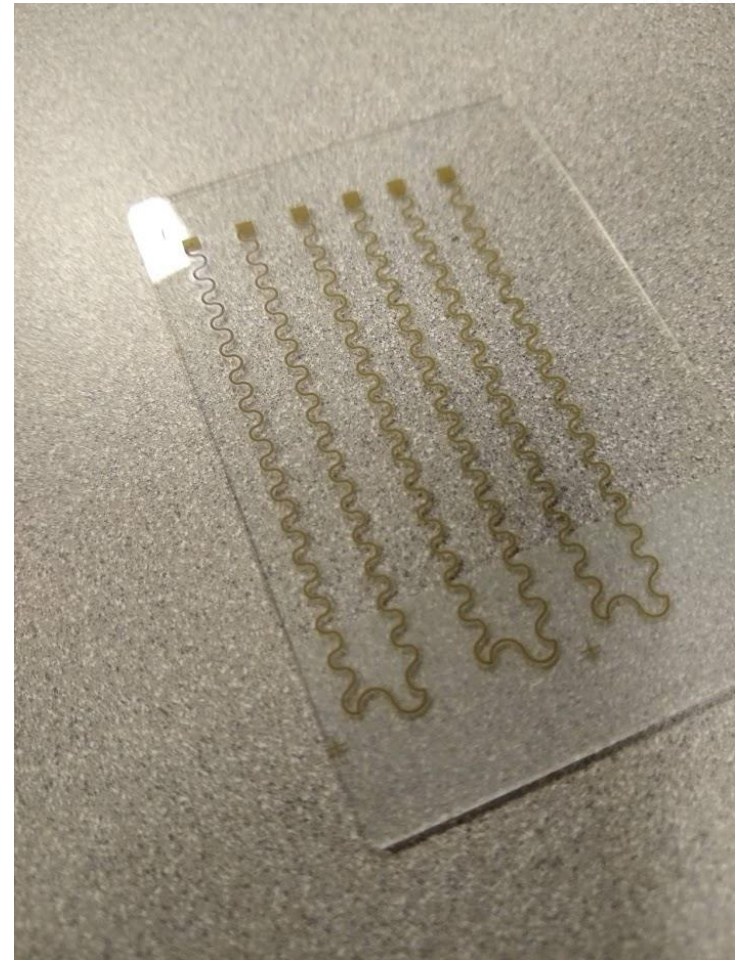
# Progress from last week

- 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



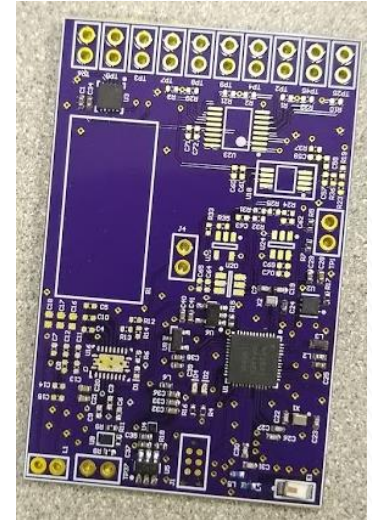
# Literature review

- ~~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:
  - LP-ECG:
    - External memory storage data transmission
  - Pressure Sensor:
    - Testing with pressure sensor





# 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