

BITNG LAB UPDATE

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Progress from last week

- Shriner's project
 - Strain sensor manufacturing
 - Temperature sensor calibration



SHRINER'S PROJECT



Glove Assembly: Temperature

- Progress:
 - Mounted pressure and temperature sensors on glove
- Problem:
 - Temperature sensors are too fragile
 - Gold deposited spiral pattern breaks due to high strain when placing glove onto hand
- Possible solution:
 - Place epoxy on spiral pattern to prevent high strain from breaking gold spiral pattern





Glove Assembly: Pressure

- Progress:
 - Mounted pressure sensors on glove
 - Encapsulated in EcoFlex
- To-Do:
 - Mount Flex PCB on back of glove
 - Solder wires to Flex PCB
 - Test glove capabilities





Firmware Development

- Firmware progress through Github:
 - Created nRF52 library holding to following:
 - Sensor drivers
 - Software drivers
 - SDK
 - Soft device
 - Created nRF52 project template:
 - Each repository will represent a new PCB
 - Contain the following:
 - Firmware
 - PCB
 - Assembly instructions
 - Operation instructions



PATH FORWARD



Path forward (6/21/21 - 6/28/21)

- Shriner's Project:
 - Sensor fabrication:
 - Strain sensor
 - screen printing
 - Sensor glove assembly:
 - Strain sensor
 - Temperature sensor
 - Pressure sensor



APPENDIX

