BITNG LAB UPDATE

Carl Demolder

Date 4/12/2021
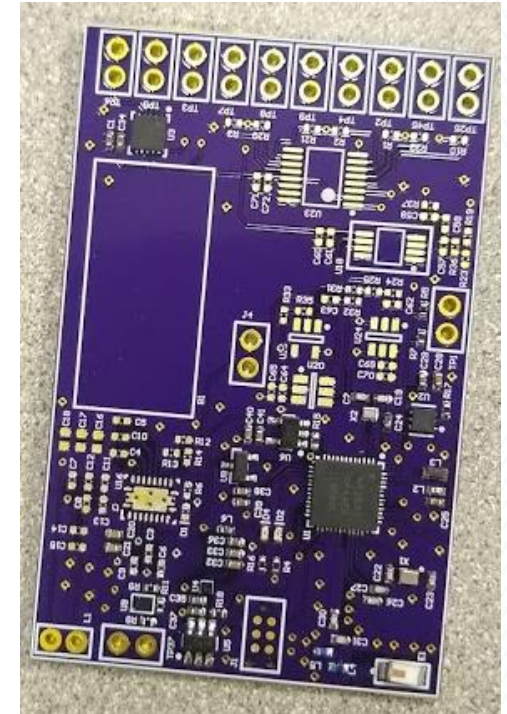
Georgia Tech

CREATING THE NEXT

Progress from last week

- Shriner's project
    - Firmware
    - Literature review
    - Strain sensor
- Low Power ECG
    - Debugging

SHRINER'S PROJECT

Firmware/Software Development

- Strain Sensor firmware (3/29 – 4/15)
  - ADG728: Finished
  - DAC5571: Finished
  - ADS1100: TO-DO

- Sensor Glove GUI (4/15 – 4/30)
  - Python
  - BLE dongle

Literature review

- Editing literature review
  - Working on new summary figure
    - Alicia and I are working on this
    - Goal is to get it done by this Friday
  - Added citations from Alicia
  - Need to edit figure references
  - Review ready for Friday's meeting

LOW POWER ECG

Low Power ECG

Debugging Problems:

1. ~~Random Disconnection~~
   1. ~~Fixed – Logging was stalling processor~~
2. Wireless Charging Coil
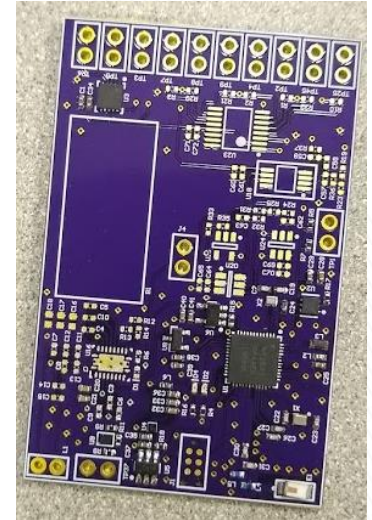   1. In Progress – Implemented smaller antenna to operate at higher frequency
3. ~~ECG Noise~~
   1. ~~Fixed – Calibration setting was enabled~~
4. BLE Antenna RSSI
   1. Lowest priority

PATH FORWARD

Path forward (4/12/21 – 4/19/21)

- Shriner's Project:
  - Strain gauge, round #10
  - Firmware development
  - Literature review update

- LP-ECG:
  - Support for Shinjae/Bu

APPENDIX