BITNG PROJECT UPDATE

Carl Demolder

Date 10/22/2020

Outline

- Progress to date
- Shriner’s project
- Schedule
  - Gantt Chart update
- Path forward

PROGRESS TO DATE

Georgia Tech
CREATING THE NEXT

Progress from last week

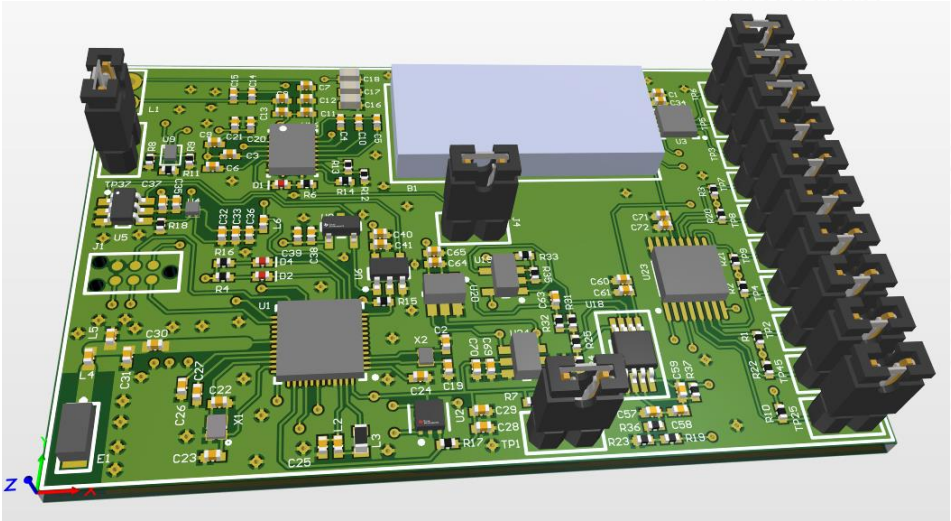
- Pediatric wearable
  - Literature review [INITIAL TABLES]
  - IRB proposal [INTIAL DRAFT]

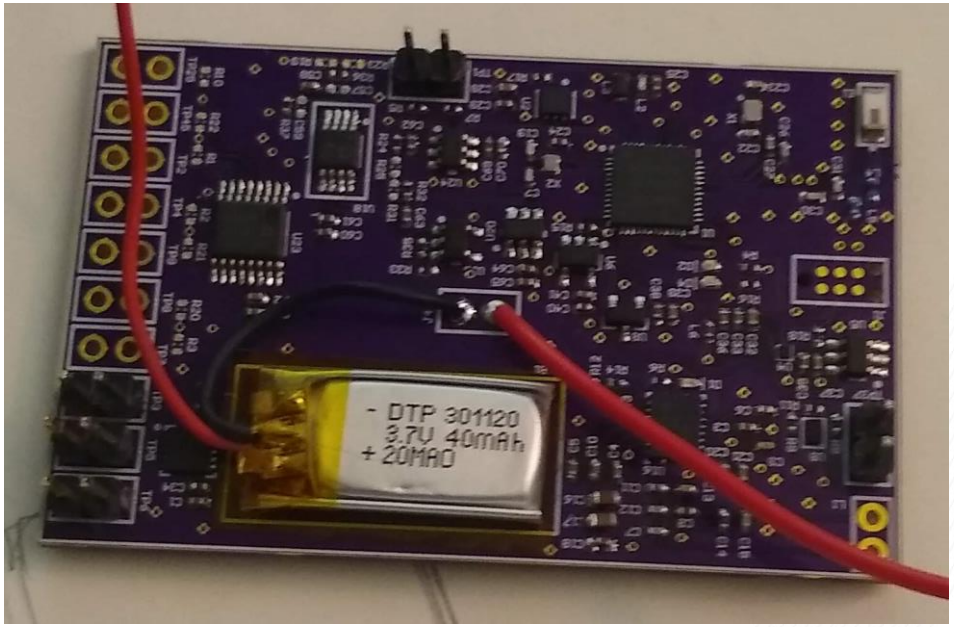
SHRINER’S PROJECT

Georgia Tech
CREATING THE NEXT

PCB design

- PCB: Arrived
- Stencil: Arrived
- Digikey: Arrived
- Assembly: Complete
- Hardware Debug: TO DO
- Programming Check: TO DO



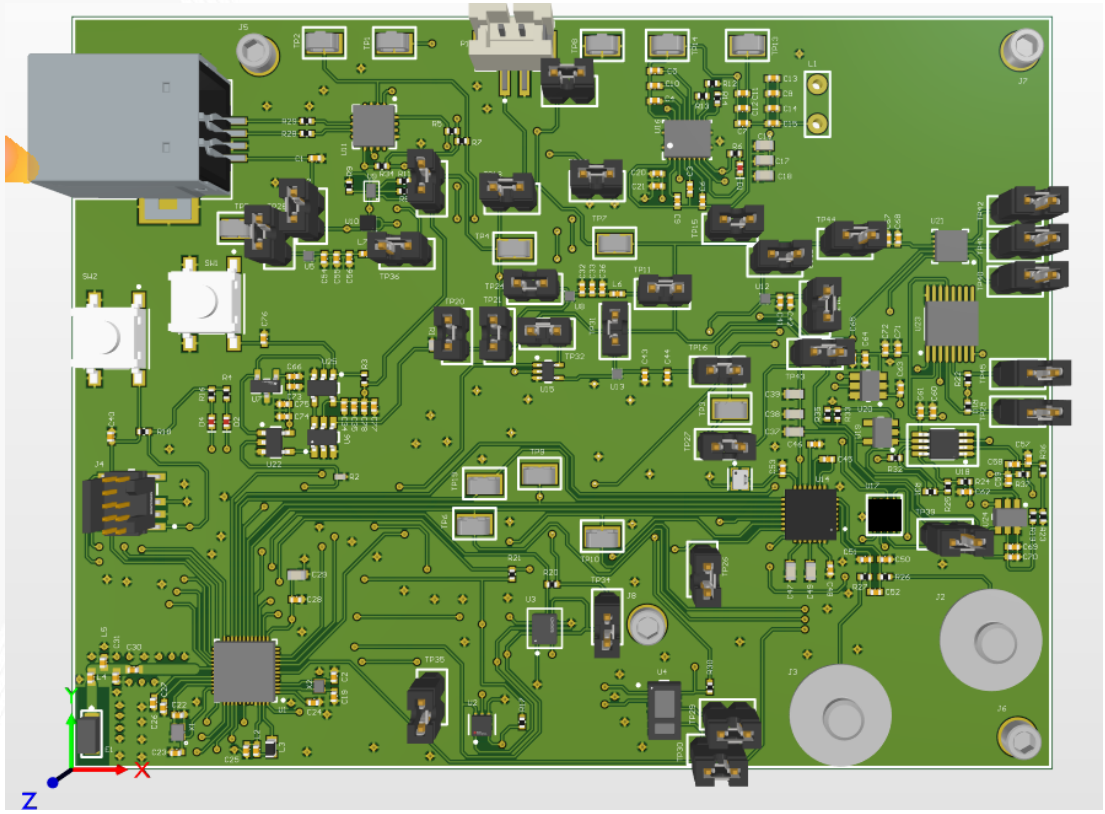


LP ECG PROJECT

Georgia Tech
CREATING THE NEXT

PCB design

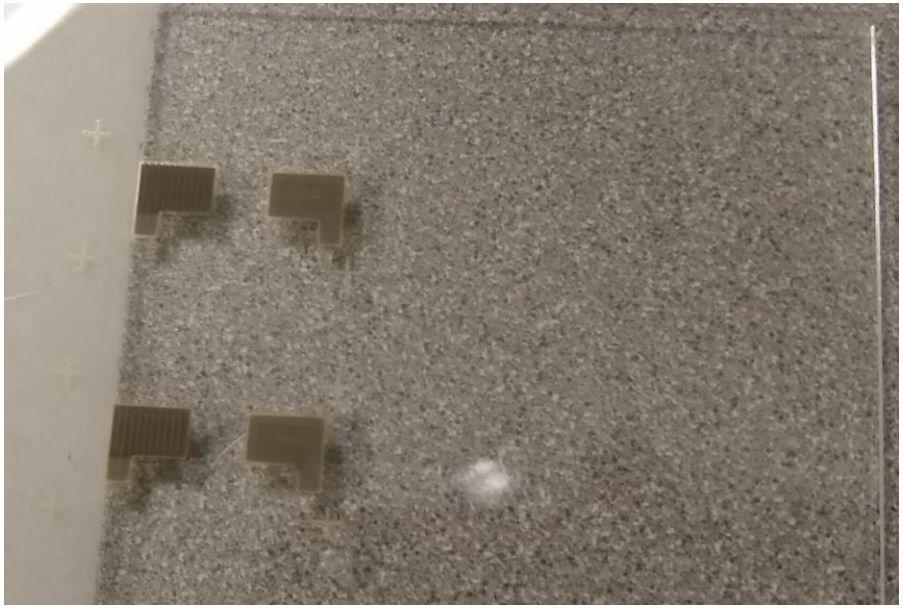
- PCB: Ordered
- Stencil: Arrived
- Digikey: Shipped



CAPACITANCE SENSOR

Capacitance sensor

- PDMA: Finished
- PI: Finished
- AG: Finished
- PDMS: Finished
- ASSEMBLY: TO DO
- ENCAPSULATION: TO DO



IRB PROPOSAL

Georgia Tech
CREATING THE NEXT

IRB proposal

- Initial Draft:
  - IRB Protocol: 80% Complete
  - Final Questionnaire
  - Recruitment Flyer
  - Consent Form
  - COI Management Plan
  - Device Statement
  - Device Biocompatibility
  - Device Biocompatibility Reference Article

- Timeline:
  - Initial Draft sent to Dr. Yeo on Tuesday (10/13)

PATH FORWARD

Georgia Tech
CREATING THE NEXT

Path forward (10/19/20 – 10/26/20)

- Pediatrics Wearable:
  - Literature review
    - Add more sources to tables
- PCB Assembly:
  - Wearable Sensor Glove
  - LP ECG
- Sensor Manufacturing:
  - Capacitance sensors (10X)

SCHEDULE

Georgia Tech
CREATING THE NEXT

Schedule Gantt chart

Task	10/11-10/18	10/18-10/25	10/25-11/01	11/01-11/08	11/08-11/15	11/08-11/15	11/16-11/23
LOW POWER ECG							
-PCB ASSEMBLY		●					
-HARDWARE DEBUGGING		●					
-FIRMWARE DEVELOPMENT							
NEUROMOTOR PEDIATRIC WEARABLE							
-LITERATURE REVIEW	✖	●					
-PCB ASSEMBLY		●					
-HARDWARE DEBUGGING		●					
-FIRMWARE DEVELOPMENT							
-PRESSURE SENSOR MANUFACTURING		●					
-IRB PROPOSAL	✖						

LEGEND

✖ FINSHED

● TO-DO

Georgia Tech
CREATING THE NEXT

APPENDIX

Georgia Tech
CREATING THE NEXT