EEar

EE 41440

January 17, 2017 Minutes

Meeting Leader: Garrett

HLD Feedback

* Try to make it more centralized, avoid mounting so many microphones
  + One unit that identifies different alarms
  + FFT (overkill?)
  + Prerecord samples to test sounds
  + Condenser microphone that runs on battery
  + Signature of sound
* Battery
  + Can’t just measure voltage
  + Fuel gauge chips that measure current
    - Maxim
    - TI
  + Find one chip that measures current and manages charging
  + Charging is pretty simple, past projects have designed these
  + Parts for charging hardware made for specific battery chemistry
  + We should be able to run on a single cell regulator
* 1 in x .5 in display we might like

For the Semester

* Split into more than 4 parts for 4 people to work on individually
  + Have leaders for parts
  + Have maybe 2 people in the subsystem groups
  + Not all 4 in the same group, too many
* Three upcoming checkpoints:
  + Design subsystem review
    - In approximately 6 weeks
    - i.e. Raspberry Pi goes off; Wi-Fi device senses sound; Bluetooth to device
    - Don’t ignore that they will be talking to each other
  + Subsystem integration test
    - Stresses interface
  + Application test
    - Adding features
    - Making pretty/sexy

Next Week

* Semester plan
  + These are the subsystems
  + How will we do this so we can get to subsystems test
* See Natalie for cart and breakout room
  + Let Schafer know when we know

Next meeting: Jan. 26, 2017