Members: GW + Undergraduates

Place: OEDK 104

Time: 12 - 1

* Wireless
  + BLE: porting optimized nrf51 code to nrf52; will be done by Saturday
  + Bluetooth: A bunch of issues. Connecting to MATLAB seems to have a throughput limit of around 300 kbps. Same with connecting from board to board.
  + BT vs. BLE
    - BLE meets all specification requirements except bandwidth
    - BT does not meet size and power constraints; right now it doesn’t even seem to meet bandwidth constraint because we have not been able to achieve more than 300 kbps
    - So far have been able to achieve:
      * BT: 250 kbps (10x less than theoretical)
      * BLE: 10 kbps (10x less than theoretical)
    - **Full switch to BLE again :(:(:(:(:(:(**
      * Story: do only a few channels, few probes, at a lower sampling frequency but it fits in power and form constraint. New low-power, high bandwidth protocol Wifi Halo just been released. In two years once wifi halo products are starting to arrive on market, we can meet bandwidth requirement.
      * We can at least get a small form factor by stacking battery, nrf, lvds; intan may have to be sticking out since it has its own pcb.
* Compression:
  + Buffers seem to work; need to implement decompression algorithm on receiver