Known issues/future ideas with GearFit2 Smart watch: OpenICE-Lite

*Issues not mentioned within the tutorial*

1. OpenSSL unimplemented
   1. Cannot connect to SSL servers (TCP ONLY)
2. Non asynchronous
   1. Threaded (pthreads), but async is better
3. Sampling rate inaccurate
   1. Ex: 50 ms within set sensor\_listener\_set\_interval: can sample widely before or after 50 ms (returns a value before 50 ms is up or way after 50 ms)
4. Sensor accuracy
   1. HR works pretty well, but accelerometer values might be erroneous (speculation)
   2. Accel doesn’t sample as much when watch is in sleep mode
   3. Repeats within HR and accel sometimes
5. Cannot have high sample per packet numbers (>80)
6. UI parameter to app functionality not implemented
   1. Ex: changing the number of samples per packet while the app is running
   2. Ex: turning on 1 sensor at a time manually
7. (UNTESTED) moving around Wi-Fi network
   1. Ex. Move around campus and see if data is still sent while connect to the same network
8. Cannot log and send if device disconnected from network
9. 2 sensors done so far (HR and accel)
   1. Can easily be fixed, but just for implementation sake