

Welcome to the program design for Remote Biosensor system !

This is the main task for BMET2922, done by group Wed-09, Yunyao Duan and Jacinta Cleary.

This program support us to measure and display your pulse through a pulse sensor, via Bluetooth.

To test the program, please download all the files, and run the "pulseHost.py" file

Once you run the main test file, you will see a GUI. When you put your finger onto the pulse sensor, you will see your pulse waveform displayed in the GUI

We also provide BPM display, **to change the data type to display, please select the data type at the left-up corner**

If your BPM abnormal, both graphical and text alarm will be displayed. The graphical is displayed in the right-center of the GUI, red means your BPM is too high, orange means your BPM is too low, green means your BPM is normal

The default high and low BPM thresholds are 90 and 40, **you can manually set up the thresholds by using the sliders at the right-bottom of the GUI**

All the state changes (change of the tabs, change of the thresholds) and alarms will be displayed in the logtext window.

To test the program with some manually generated error, please push the swiches on the hardware

- **Switch 1:** push to restart the uC
- **Switch 2:**
 - push for the 1st time, to suspend comms
 - push for the 2nd time, to resume commes
 - push for the 3rd time, to cause a single sequence number error
 - push for the 4th time, to cause a single checksum error