

Picram Datasets

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I. OBJECTIVE

- 1) To update the status of PICRAM datasets.

II. COMPLETED TASKS

A. Data structure

The main focus this week was on the PICRAM datasets. Matlab codings have been developed to read the files which are in .csv format and convert them into .mat files. Some patients have more than one ECG and PPG files. A total of 199 patients ECG and PPG data from Oxford ward, not the ICU, have been processed into Matlab timestamps and uploaded to 'bspproject9\OURR\Picram' shared folder. Each patient's .mat data has been named according to patient's ID. Inside the 'patientID'.mat, there are ECG and PPG data, named ECG1, ECG2,..ECGn and PPG1, PPG2,..PPGm, where n,m are the total number of ECG and PPG, respectively.

From the error message shown by Matlab, there are some ECG and PPG file contain no data and some have more than 2 Gb data. The coding has skipped file without data. The 'xlsread' command which is currently used is unable to read .csv file which has more than 2 Gb such as the ECG data in '012' and five others. Using the current coding, it took more than 24 hours to read all the ECG and PPG data from 199 patients, and save it into 'bspproject9\OURR\Picram'. The improved version will be done soon. Another script to eliminate two unused variables ('dirName' and 'counter') in the current saved .mat file will be created, re-run and the data will be re-save next Monday. A log recording for all the problematic ECG and PPG data (≥ 2 Gb and 0b) has been kept.

III. CONCLUSION

A total of 199 patients ECG and PPG data have been formatted and uploaded into 'bspproject9\OURR\Picram'. The version 2.0 coding will solve the ≥ 2 Gb data files and remove the 'dirName' and counter variables.