

Data collection:

Use drunk master app.

When starting to collect, The drink button at right bottom becomes the labeling button. The data coming to the phone in the period you hold the button will all be labeled as "fall".

Data is under /Document/Data/ in your phone.

Data processing:

Use Clean12.r R script

Set 1. The path of "the folder contains all raw data you want to combine" (all data under that folder will be merged and processed)

Set 2. The name of the folder for created output file. (Will be under 1. folder)

Set 3. The name of processed data. (Will be under 2. folder)

Model generation & prediction & analysis:

Use modelGen.java to generate model. It's a multi-functional program that can cover the rest of experiment.

Set 1. The path of source train data.

Set 2. The path for output model

Set 3. The path of unlabeled data (which is the test data you would like to run the model against) (it might have labels but won't be used in prediction part)

Set 4. The path of predicted data (generated after 3. It's the labeled version of 3.) The file will be in the arff format.

Set 5. The data you want to analysis (can be the predicted file from 4. or any other CSV/arff files)

Set 6. The thresholds you would like to use when analyzing at 5.

Set 7. The path of the original file you want to compare with 5.

You can choose to only use part of functions by using user input.

The analysis part will go through the file and count the occurrence of consecutive fall which is in the threshold range, so it can be treated as a simulated version of real time experiment.

The line number of each found fall will be displayed, as well as the comparison with the original file.