Code book

The analysis has been conducted on a dataset containing some features recorded by the accelerometer and the gyroscope of a Samsung mobile phone handled by 30 subjects doing 5 differents type of activities.

The analysys produces the mean of the measures contained in the mentioned dataset for every type of activity and subject.

"ActId" - is the identificator of the type of activity done during the experiment:
1 WALKING
2 WALKING_UPSTAIRS
3 WALKING_DOWNSTAIRS
4 SITTING
5 STANDING
6 LAYING

“SubId" - is the identificator of the subjects who participated to the experiment: is an integer number from 1 to 30 (only 1 and 2 in the observations I've considered)

"mean(tBodyAcc_mean_X)" - mean value of the variable in parentesys
"mean(tBodyAcc_mean_Y)" - mean value of the variable in parentesys
"mean(tBodyAcc_mean_Z)" - mean value of the variable in parentesys
"mean(tBodyAcc_std_X)" - mean value of the variable in parentesys
"mean(tBodyAcc_std_Y)" - mean value of the variable in parentesys
"mean(tBodyAcc_std_Z)" - mean value of the variable in parentesys
"mean(tGravityAcc_mean_X)" - mean value of the variable in parentesys
"mean(tGravityAcc_mean_Y)" - mean value of the variable in parentesys
"mean(tGravityAcc_mean_Z)" - mean value of the variable in parentesys
"mean(tGravityAcc_std_X)" - mean value of the variable in parentesys
"mean(tGravityAcc_std_Y)" - mean value of the variable in parentesys
"mean(tGravityAcc_std_Z)" - mean value of the variable in parentesys
"mean(tBodyAccJerk_mean_X)" - mean value of the variable in parentesys
"mean(tBodyAccJerk_mean_Y)" - mean value of the variable in parentesys
"mean(tBodyAccJerk_mean_Z)" - mean value of the variable in parentesys
"mean(tBodyAccJerk_std_X)" - mean value of the variable in parentesys
"mean(tBodyAccJerk_std_Y)" - mean value of the variable in parentesys
"mean(tBodyAccJerk_std_Z)" - mean value of the variable in parentesys
"mean(tBodyGyro_mean_X)" - mean value of the variable in parentesys
"mean(tBodyGyro_mean_Y)" - mean value of the variable in parentesys
"mean(tBodyGyro_mean_Z)" - mean value of the variable in parentesys
"mean(tBodyGyro_std_X)" - mean value of the variable in parentesys
"mean(tBodyGyro_std_Y)" - mean value of the variable in parentesys
"mean(tBodyGyro_std_Z)" - mean value of the variable in parentesys
"mean(tBodyGyroJerk_mean_X)" - mean value of the variable in parentesys
"mean(tBodyGyroJerk_mean_Y)" - mean value of the variable in parentesys
"mean(tBodyGyroJerk_mean_Z)” - mean value of the variable in parentesys
"mean(tBodyGyroJerk_std_X)" - mean value of the variable in parentesys
"mean(tBodyGyroJerk_std_Y)" - mean value of the variable in parentesys
"mean(tBodyGyroJerk_std_Z)" - mean value of the variable in parentesys
"mean(tBodyAccMag_mean)" - mean value of the variable in parentesys
"mean(tBodyAccMag_std)" - mean value of the variable in parentesys
"mean(tGravityAccMag_mean)" - mean value of the variable in parentesys
"mean(tGravityAccMag_std)" - mean value of the variable in parentesys
"mean(tBodyAccJerkMag_mean)" - mean value of the variable in parentesys
"mean(tBodyAccJerkMag_std)" - mean value of the variable in parentesys
"mean(tBodyGyroMag_mean)" - mean value of the variable in parentesys
"mean(tBodyGyroMag_std)" - mean value of the variable in parentesys
"mean(tBodyGyroJerkMag_mean)" - mean value of the variable in parentesys
"mean(tBodyGyroJerkMag_std)" - mean value of the variable in parentesys
"mean(fBodyAcc_mean_X)" - mean value of the variable in parentesys
"mean(fBodyAcc_mean_Y)" - mean value of the variable in parentesys
"mean(fBodyAcc_mean_Z)" - mean value of the variable in parentesys
"mean(fBodyAcc_std_X)" - mean value of the variable in parentesys
"mean(fBodyAcc_std_Y)" - mean value of the variable in parentesys
"mean(fBodyAcc_std_Z)" - mean value of the variable in parentesys
"mean(fBodyAccJerk_mean_X)" - mean value of the variable in parentesys
"mean(fBodyAccJerk_mean_Y)" - mean value of the variable in parentesys
"mean(fBodyAccJerk_mean_Z)" - mean value of the variable in parentesys
"mean(fBodyAccJerk_std_X)" - mean value of the variable in parentesys
"mean(fBodyAccJerk_std_Y)" - mean value of the variable in parentesys
"mean(fBodyAccJerk_std_Z)" - mean value of the variable in parentesys
"mean(fBodyGyro_mean_X)" - mean value of the variable in parentesys
"mean(fBodyGyro_mean_Y)" - mean value of the variable in parentesys
"mean(fBodyGyro_mean_Z)" - mean value of the variable in parentesys

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"mean(fBodyGyro_std_X)"             - mean value of the variable in parentesys
"mean(fBodyGyro_std_Y)"             - mean value of the variable in parentesys
"mean(fBodyGyro_std_Z)"             - mean value of the variable in parentesys
"mean(fBodyAccMag_mean)"            - mean value of the variable in parentesys
"mean(fBodyAccMag_std)"             - mean value of the variable in parentesys
"mean(fBodyBodyAccJerkMag_mean)"    - mean value of the variable in parentesys
"mean(fBodyBodyAccJerkMag_std)"     - mean value of the variable in parentesys
"mean(fBodyBodyGyroMag_mean)"       - mean value of the variable in parentesys
"mean(fBodyBodyGyroMag_std)"        - mean value of the variable in parentesys
"mean(fBodyBodyGyroJerkMag_mean)"   - mean value of the variable in parentesys
"mean(fBodyBodyGyroJerkMag_std)"    - mean value of the variable in parentesys
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an other information should be founded on http://archive.ics.uci.edu/ml/datasets/Human+Activity+Recognition+Using+Smartphones

Citation

Davide Anguita, Alessandro Ghio, Luca Oneto, Xavier Parra and Jorge L. Reyes-Ortiz. Human Activity Recognition on Smartphones using a Multiclass Hardware-Friendly Support Vector Machine. International Workshop of Ambient Assisted Living (IWAAL 2012). Vitoria-Gasteiz, Spain. Dec 2012