Code Book – tidy Samsung Dataset

activityLabel 18

Type of activity performed by each subject

Walking
Walking_Upstairs
Walking_Downstairs
Sitting
Standing
Laying

feature 20

Vector of features from the accelerometer and gyroscope 3-axial raw signals denoted by tAcc-XYZ and tGyro-XYZ.

The acceleration signal was then separated into body and gravity acceleration signals (tBodyAcc-XYZ and tGravityAcc-XYZ)

Time domain signals have prefix 't' to denote time.

The body linear acceleration and angular velocity were derived in time to obtain Jerk signals (tBodyAccJerk-XYZ and tBodyGyroJerk-XYZ).

The magnitude of these three-dimensional signals were calculated using the Euclidean norm (tBodyAccMag, tGravityAccMag, tBodyAccJerkMag, tBodyGyroMag, tBodyGyroJerkMag).

Frequency domain signals have prefix 'f' to denote frequency.

fBodyAcc-X
fBodyAcc-Y
fBodyAcc-Z
fBodyAccJerk-X
fBodyAccJerk-Y
fBodyAccJerk-Z
fBodyAccMag
fBodyBodyAccJerkMag
fBodyBodyGyroJerkMag
fBodyBodyGyroMag
fBodyGyro-X
fBodyGyro-Y
fBodyGyro-Z
tBodyAcc-X
tBodyAcc-Y
tBodyAcc-Z
tBodyAccJerk-X
tBodyAccJerk-Y
tBodyAccJerk-Z
tBodyAccJerkMag

tBodyAccMag
tBodyGyro-X
tBodyGyro-Y
tBodyGyro-Z
tBodyGyroJerk-X
tBodyGyroJerk-Y
tBodyGyroJerk-Z
tBodyGyroJerkMag
tBodyGyroMag
tGravityAcc-X
tGravityAcc-Y
tGravityAcc-Z
tGravityAccMag

avgMean 20

Numeric vector with the average of the mean value estimate for each feature averaging over each observation for each activity

avgStd 20

Numeric vector with the average of the standard deviation value estimate for each feature averaging over each observation for each activity