DATA DICTIONARY
2012 Human Activity Using Smartphones Data Set

Subjectnumber
    Number assigned to each of 30 volunteers. (1-30)
Activity
    Activity volunteer is performing (WALKING, WALKING_UPSTAIRS, WALKING_DOWNSTAIRS, SITTING, STANDING, LAYING)

tBodyAcc-mean()-X
    Average body acceleration in the X plane
tBodyAcc-mean()-Y
    Average body acceleration in the Y plane
tBodyAcc-mean()-Z
    Average body acceleration in the Z plane

tBodyAcc-std()-X
    Average of the standard deviation of body acceleration in the X plane.
tBodyAcc-std()-Y
        Average of the standard deviation of body acceleration in the Y plane.
tBodyAcc-std()-Z
    Average of the standard deviation of body acceleration in the Z plane.

tGravityAcc-mean()-X
    Average of the static(gravity acceleration) in the X plane
tGravityAcc-mean()-Y
    Average of the static(gravity acceleration) in the Y plane
tGravityAcc-mean()-Z
    Average of the static(gravity acceleration) in the Z plane

tGravityAcc-std()-X
    Average of the standard deviation of the static(gravity acceleration) in the X plane
tGravityAcc-std()-Y
    Average of the standard deviation of the static(gravity acceleration) in the Y plane
tGravityAcc-std()-Z
    Average of the standard deviation of the static(gravity acceleration) in the Z plane

tBodyAccJerk-mean()-X
    Average of the rate of change of acceleration in the X plane
tBodyAccJerk-mean()-Y
    Average of the rate of change of acceleration in the Y plane
tBodyAccJerk-mean()-Z
    Average of the rate of change of acceleration in the Z plane

tBodyAccJerk-std()-X
    Average of the standard deviation of the rate of change of
    acceleration in the X plane
tBodyAccJerk-std()-Y
    Average of the standard deviation of the rate of change of
    acceleration in the Y plane
tBodyAccJerk-std()-Z
    Average of the standard deviation of the rate of change of
    acceleration in the X plane

tBodyGyro-mean()-X
    Average gyroscope value in the X plane
tBodyGyro-mean()-Y
    Average gyroscope value in the Y plane
tBodyGyro-mean()-Z
    Average gyroscope value in the Z plane

tBodyGyro-std()-X
    Average of the standard deviation of the gyroscope value in the
    X plane
tBodyGyro-std()-Y
    Average of the standard deviation of the gyroscope value in the
    Y plane
tBodyGyro-std()-Z
    Average of the standard deviation of the gyroscope value in the
    Z plane

tBodyGyroJerk-mean()-X
    Average of the rate of change of the gyroscope value in the X
    plane
tBodyGyroJerk-mean()-Y
    Average of the rate of change of the gyroscope value in the Y
    plane
tBodyGyroJerk-mean()-Z
    Average of the rate of change of the gyroscope value in the Z
    plane

tBodyGyroJerk-std()-X
    Average of the standard deviation of the rate of change of the
    gyroscope value in the X plane
tBodyGyroJerk-std()-Y
    Average of the standard deviation of the rate of change of the
    gyroscope value in the Y plane
tBodyGyroJerk-std()-Z
    Average of the standard deviation of the rate of change of the
    gyroscope value in the Z plane

tBodyAccMag-mean()
    Average of the magnitude of the acceleration
tBodyAccMag-std()
    Average of the standard deviation of the magnitude of the
    acceleration

tGravityAccMag-mean()
     Average of the magnitude of the gravity acceleration
tGravityAccMag-std()
     Average of the standard deviation of the gravity acceleration
tBodyAccJerkMag-mean()
     Average of the magnitude of the rate of acceleration change
tBodyAccJerkMag-std()
     Average of the standard deviation of the magnitude of the rate
     of acceleration change
tBodyGyroMag-mean()
     Average of the magnitude of the gyroscope
tBodyGyroMag-std()
     Average of the standard deviation of the magnitude of the
     gyroscope
tBodyGyroJerkMag-mean()
     Average of the magnitude of the rate of change of the gyroscope
tBodyGyroJerkMag-std()
     Average of the standard deviation of the magnitude of the rate
     of change of the gyroscope

fBodyAcc-mean()-X
     Average body acceleration in the X plane, uses FFT series
fBodyAcc-mean()-Y
     Average body acceleration in the Y plane, uses FFT series
fBodyAcc-mean()-Z
     Average body acceleration in the Z plane uses FFT series

fBodyAcc-std()-X
     Average of the standard deviation of body acceleration in the X
     plane. uses FFT series
fBodyAcc-std()-Y
         Average of the standard deviation of body acceleration in
     the Y plane. uses FFT series
fBodyAcc-std()-Z
     Average of the standard deviation of body acceleration in the Z
     plane. uses FFT series

fBodyAcc-meanFreq()-X
     Average of the frequency of the acceleration. X axis. Uses FFT
     series
fBodyAcc-meanFreq()-Y
     Average of the frequency of the acceleration. Y axis. Uses FFT
     series

fBodyAcc-meanFreq()-Z
     Average of the frequency of the acceleration. Z axis. Uses FFT
     series

fBodyAccJerk-mean()-X
Average of the rate of change of acceleration in the X plane
Uses FFT series

fBodyAccJerk-mean()-Y
Average of the rate of change of acceleration in the Y plane
Uses FFT series

fBodyAccJerk-mean()-Z
Average of the rate of change of acceleration in the Z plane
Uses FFT series

fBodyAccJerk-std()-X
Average of the standard deviation of the rate of change of
acceleration in the X plane. Uses FFT series

fBodyAccJerk-std()-Y
Average of the standard deviation of the rate of change of
acceleration in the Y plane. Uses FFT series

fBodyAccJerk-std()-Z
Average of the standard deviation of the rate of change of
acceleration in the X plane. Uses FFT series

fBodyAccJerk-meanFreq()-X
Average of the rate of change of acceleration in the X plane.
Uses FFT series
fBodyAccJerk-meanFreq()-Y
Average of the rate of change of acceleration in the Y plane.
Uses FFT series
fBodyAccJerk-meanFreq()-Z
Average of the rate of change of acceleration in the Z plane.
Uses FFT series

fBodyGyro-mean()-X
Average gyroscope value in the X plane. Uses FFT series
fBodyGyro-mean()-Y
Average gyroscope value in the Y plane. Uses FFT series
fBodyGyro-mean()-Z
Average gyroscope value in the Z plane. Uses FFT series

fBodyGyro-std()-X
Average of the standard deviation of the gyroscope value in the
X plane. Uses FFT series
fBodyGyro-std()-Y
Average of the standard deviation of the gyroscope value in the
Y plane. Uses FFT series
fBodyGyro-std()-Z
Average of the standard deviation of the gyroscope value in the
Z plane. Uses FFT series

fBodyGyro-meanFreq()-X
    Average of the Frequency in the X axis. Uses FFT series.
fBodyGyro-meanFreq()-Y
    Average of the Frequency in the Y axis. Uses FFT series.
fBodyGyro-meanFreq()-Z
    Average of the Frequency in the Z axis. Uses FFT series.
fBodyAccMag-mean()
    Average of the magnitude of the acceleration. Uses FFT series.
fBodyAccMag-std()
    Average of the standard deviation of the magnitude of the
    acceleration. Uses FFT series.

fBodyAccMag-meanFreq()
    Average of the magnitude of the acceleration. Uses FFT series

fBodyBodyAccJerkMag-mean()
    Average of the magnitude of the rate of change of acceleration.
    Uses FFT series

fBodyBodyAccJerkMag-meanFreq()
    Average of the magnitude of the rate of acceleration change.
    Uses FFT series.

fBodyBodyAccJerkMag-std()
    Average of the standard deviation of the magnitude of the rate
    of acceleration change.   Uses FFT series.

fBodyBodyGyroMag-mean()
    Average of the magnitude of the gyroscope value. Uses FFT
    series.
fBodyBodyGyroMag-std()
    Average of the standard deviation of the gyroscope value. Uses
    FFT series.
fBodyBodyGyroMag-meanFreq()
    Average of the frequency of gyroscope data. Uses FFT series.
fBodyBodyGyroJerkMag-mean()
    Average of the magnitude of the change of the gyroscope value.
    Uses FFT series.
fBodyBodyGyroJerkMag-std()
    Average of the magnitude of the standard deviation of the
    change of the gyroscope value. Uses FFT series.

fBodyBodyGyroJerkMag-meanFreq()
    Average of the magnitude of the change in acceleration frequency
    data. Uses FFT series.