

Data Dictionary

Acceleration and gyroscope data for 30 individuals performing 6 activities as captured with a smart phone – average values

All values between -1 and 1 unless otherwise noted.

Subject

Identification of subject performing the activities
Values: 1-30

ActivityName

Descriptive name of the activity being performed
Values: WALKING, WALKING_UPSTAIRS, WALKING_DOWNSTAIRS, SITTING, STANDING, LAYING

tBodyAcc_Mean_X

tBodyAcc_Mean_Y

tBodyAcc_Mean_Z

Average mean body acceleration in X, Y and Z directions in the time domain

tBodyAcc_Std_X

tBodyAcc_Std_Y

tBodyAcc_Std_Z

Average standard deviation of body acceleration in X, Y and Z directions in the time domain

tGravityAcc_Mean_X

tGravityAcc_Mean_Y

tGravityAcc_Mean_Z

Average mean acceleration in X, Y and Z directions due to gravity in the time domain

tGravityAcc_Std_X

tGravityAcc_Std_Y

tGravityAcc_Std_Z

Average standard deviation of acceleration in X, Y and Z directions due to gravity in the time domain

tBodyAccJerk_Mean_X

tBodyAccJerk_Mean_Y

tBodyAccJerk_Mean_Z

Average mean of change of body acceleration in X, Y and Z directions in the time domain

tBodyAccJerk_Std_X

tBodyAccJerk_Std_Y

tBodyAccJerk_Std_Z

Average mean of standard deviation of change of body acceleration in X, Y and Z directions in the time domain

tBodyGyro_Mean_X
tBodyGyro_Mean_Y
tBodyGyro_Mean_Z
Average mean body gyroscopic signal in X, Y and Z directions in the time domain

tBodyGyro_Std_X
tBodyGyro_Std_Y
tBodyGyro_Std_Z
Average standard deviation of body gyroscopic signal in X, Y and Z directions in the time domain

tBodyGyroJerk_Mean_X
tBodyGyroJerk_Mean_Y
tBodyGyroJerk_Mean_Z
Average mean change of body gyroscopic signal in X, Y and Z directions in the time domain

tBodyGyroJerk_Std_X
tBodyGyroJerk_Std_Y
tBodyGyroJerk_Std_Z
Average standard deviation of standard of body gyroscopic signal in X, Y and Z directions in the time domain

tBodyAccMag_Mean
Average mean magnitude of body acceleration in the time domain

tBodyAccMag_Std
Average mean of standard deviation of magnitude of body acceleration in the time domain

tGravityAccMag_Mean
Average mean magnitude of gravity acceleration in the time domain

tGravityAccMag_Std
Average mean of standard deviation of magnitude of gravity acceleration in the time domain

tBodyAccJerkMag_Mean
Average mean magnitude of change of body acceleration in the time domain

tBodyAccJerkMag_Std
Average mean of change of standard deviation of magnitude of body acceleration in the time domain

tBodyGyroMag_Mean
Average mean magnitude of gyroscopic signal in the time domain

tBodyGyroMag_Std
Average mean of standard deviation of magnitude of gyroscopic signal in the time domain

tBodyGyroJerkMag_Mean

Average mean magnitude of change of gyroscopic signal in the time domain

tBodyGyroJerkMag_Std

Average mean of change of standard deviation of magnitude of gyroscopic signal in the time domain

fBodyAcc_Mean_X

fBodyAcc_Mean_Y

fBodyAcc_Mean_Z

Average mean body acceleration in X, Y and Z directions in the frequency domain

fBodyAcc_Std_X

fBodyAcc_Std_Y

fBodyAcc_Std_Z

Average standard deviation of body acceleration in X, Y and Z directions in the frequency domain

fBodyAcc_MeanFreq_X

fBodyAcc_MeanFreq_Y

fBodyAcc_MeanFreq_Z

Average mean of index of frequency of body acceleration in directions X, Y and Z

fBodyAccJerk_Mean_X

fBodyAccJerk_Mean_Y

fBodyAccJerk_Mean_Z

Average mean of change of body acceleration in X, Y and Z directions in the frequency domain

fBodyAccJerk_Std_X

fBodyAccJerk_Std_Y

fBodyAccJerk_Std_Z

Average mean of standard deviation of change of body acceleration in X, Y and Z directions in the frequency domain

fBodyAccJerk_MeanFreq_X

fBodyAccJerk_MeanFreq_Y

fBodyAccJerk_MeanFreq_Z

Average mean of index of frequency of change of body acceleration in directions X, Y and Z

fBodyGyro_Mean_X

fBodyGyro_Mean_Y

fBodyGyro_Mean_Z

Average mean body gyroscopic signal in X, Y and Z directions in the frequency domain

fBodyGyro_Std_X
fBodyGyro_Std_Y
fBodyGyro_Std_Z
Average standard deviation of body gyroscopic signal in X, Y and Z directions in the frequency domain

fBodyGyro_MeanFreq_X
fBodyGyro_MeanFreq_Y
fBodyGyro_MeanFreq_Z
Average mean of index of frequency of change of body gyroscopic signal in directions X, Y and Z

fBodyAccMag_Mean
Average mean of magnitude of body acceleration in the frequency domain

fBodyAccMag_Std
Average mean of standard deviation of magnitude of body acceleration in the frequency domain

fBodyAccMag_MeanFreq
Average mean of magnitude of frequency of body acceleration

fBodyBodyAccJerkMag_Mean
Average mean of magnitude of frequency of change of body acceleration in the frequency domain

fBodyBodyAccJerkMag_Std
Average mean of standard deviation of magnitude of frequency of change of body acceleration in the frequency domain

fBodyBodyAccJerkMag_MeanFreq
Average mean of magnitude of frequency of change of body acceleration

fBodyBodyGyroMag_Mean
Average mean of magnitude of body mean gyroscopic signal in the frequency domain

fBodyBodyGyroMag_Std
Average mean of standard deviation of magnitude of body mean gyroscopic signal in the frequency domain

fBodyBodyGyroMag_MeanFreq
Average mean frequency of magnitude of body mean gyroscopic signal

fBodyBodyGyroJerkMag_Mean
Average mean of magnitude of change of body mean gyroscopic signal in the frequency domain

fBodyBodyGyroJerkMag_Std
Average mean of standard deviation of magnitude of change of body mean gyroscopic signal in the frequency domain

fBodyBodyGyroJerkMag_MeanFreq

Average mean frequency of magnitude of change of body mean
gyroscopic signal

angle_tBodyAccMean,gravity

Average mean angle between body acceleration vector and gravity

angle_tBodyAccJerkMean,gravityMean

Average mean angle between body acceleration change vector and
gravity

angle_tBodyGyroMean,gravityMean

Average mean angle between mean gyroscopic signal vector and mean
gravity

angle_tBodyGyroJerkMean,gravityMean

Average mean angle between mean gyroscopic signal change vector and
mean gravity

angle_X,gravityMean

angle_Y,gravityMean

angle_Z,gravityMean

Average mean angles between directions X, Y and Z and mean gravity