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 preforming 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