

Human Activity Recognition Using Smartphones Dataset

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Monday, January 19, 2015

DATA DICTIONARY

SUBJECT This data set contains the Subject info

Subject Id	Subject Description
1	Subject - 1
2	Subject - 2
3	Subject - 3
4	Subject - 4
5	Subject - 5
6	Subject - 6
7	Subject - 7
8	Subject - 8
9	Subject - 9
10	Subject - 10
11	Subject - 11
12	Subject - 12
13	Subject - 13
14	Subject - 14
15	Subject - 15
16	Subject - 16
17	Subject - 17
18	Subject - 18
19	Subject - 19
20	Subject - 20
21	Subject - 21
22	Subject - 22
23	Subject - 23
24	Subject - 24
25	Subject - 25
26	Subject - 26
27	Subject - 27
28	Subject - 28

Subject Id	Subject Description
29	Subject - 29
30	Subject - 30

ACTIVITY This has description of the Activities done by each subject.

Activity Id	Activity Description
1	WALKING
2	WALKING_UPSTAIRS
3	WALKING_DOWNSTAIRS
4	SITTING
5	STANDING
6	LAYING

SUMMARYSUBJECTDF The data is grouped by Subject (SUBJECT_ID) by Activity (ACTIVITY_DESC). The columns contain the Mean (also known as Average) value of the column for that observation. So this means there will be a row for every combination of Subject and activity (30 subjects by 6 Activity = 180 rows)

Column Name	Column Description
SUBJECT_ID	Subject Id
ACTIVITY_DESC	Activity Description
timeBodyAccel-mean-X	Time Body Acceleration - Mean() - X Axis
timeBodyAccel-mean-Y	Time Body Acceleration - Mean() - Y Axis
timeBodyAccel-mean-Z	Time Body Acceleration - Mean()-Z Axis
timeBodyAccel-std-X	Time Body Acceleration - StandardDeviation() - X Axis
timeBodyAccel-std-Y	Time Body Acceleration - StandardDeviation() - Y Axis
timeBodyAccel-std-Z	Time Body Acceleration - StandardDeviation() - Z Axis
timeGravityAccel-mean-X	Time Gravity Acceleration - Mean() - X Axis
timeGravityAccel-mean-Y	Time Gravity Acceleration - Mean() - Y Axis
timeGravityAccel-mean-Z	Time Gravity Acceleration - Mean() - Z Axis
timeGravityAccel-std-X	Time Gravity Acceleration - StandardDeviation() - X Axis
timeGravityAccel-std-Y	Time Gravity Acceleration - StandardDeviation() - Y Axis
timeGravityAccel-std-Z	Time Gravity Acceleration - StandardDeviation() - Z Axis
timeBodyAccelJerk-mean-X	Time Body Acceleration Jerk - Mean() - X axis
timeBodyAccelJerk-mean-Y	Time Body Acceleration Jerk - Mean() - Y axis
timeBodyAccelJerk-mean-Z	Time Body Acceleration Jerk - Mean() - Z axis
timeBodyAccelJerk-std-X	Time Body Acceleration Jerk - StandardDeviation() - X axis

Column Name	Column Description
timeBodyAccelJerk-std-Y	Time Body Acceleration Jerk - StandardDeviation() - Y axis
timeBodyAccelJerk-std-Z	Time Body Acceleration Jerk - StandardDeviation() - Z axis
timeBodyGyro-mean-X	Time Body Gyroscope - Mean() - X axis
timeBodyGyro-mean-Y	Time Body Gyroscope - Mean() - Y axis
timeBodyGyro-mean-Z	Time Body Gyroscope - Mean() - Z axis
timeBodyGyro-std-X	Time Body Gyroscope - StandardDeviation() - X axis
timeBodyGyro-std-Y	Time Body Gyroscope - StandardDeviation() - Y axis
timeBodyGyro-std-Z	Time Body Gyroscope - StandardDeviation() - Z axis
timeBodyGyroJerk-mean-X	Time Body Gyroscope Jerk - Mean() - X axis
timeBodyGyroJerk-mean-Y	Time Body Gyroscope Jerk - Mean() - Y axis
timeBodyGyroJerk-mean-Z	Time Body Gyroscope Jerk - Mean() - Z axis
timeBodyGyroJerk-std-X	Time Body Gyroscope Jerk - StandardDeviation() - X axis
timeBodyGyroJerk-std-Y	Time Body Gyroscope Jerk - StandardDeviation() - Y axis
timeBodyGyroJerk-std-Z	Time Body Gyroscope Jerk - StandardDeviation() - Z axis
timeBodyAccelMag-mean	Time Body Acceleration Magnitude - Mean()
timeBodyAccelMag-std	Time Body Acceleration Magnitude StandardDeviation()
timeGravityAccelMag-mean	Time Gravity Acceleration Magnitude - Mean()
timeGravityAccelMag-std	Time Gravity Acceleration Magnitude StandardDeviation()
timeBodyAccelJerkMag-mean	Time Body Acceleration Jerk Magnitude - Mean()
timeBodyAccelJerkMag-std	Time Body Acceleration Jerk Magnitude StandardDeviation()
timeBodyGyroMag-mean	Time Body Gyroscope Magnitude - Mean()
timeBodyGyroMag-std	Time Body Gyroscope Magnitude StandardDeviation()
timeBodyGyroJerkMag-mean	Time Body Gyroscope Jerk Magnitude - Mean()
timeBodyGyroJerkMag-std	Time Body Gyroscope Jerk Magnitude - StandardDeviation()
freqBodyAccel-mean-X	Frequency Body Acceleration Jerk - Mean() X axis
freqBodyAccel-mean-Y	Frequency Body Acceleration Jerk - Mean() Y axis
freqBodyAccel-mean-Z	Frequency Body Acceleration Jerk - Mean() Z axis
freqBodyAccel-std-X	Frequency Body Acceleration - StandardDeviation() X axis
freqBodyAccel-std-Y	Frequency Body Acceleration - StandardDeviation() Y axis
freqBodyAccel-std-Z	Frequency Body Acceleration - StandardDeviation() Z axis
freqBodyAccel-meanFreq-X	Frequency Body Acceleration - Mean() Frequency X axis
freqBodyAccel-meanFreq-Y	Frequency Body Acceleration - Mean() Frequency Y axis
freqBodyAccel-meanFreq-Z	Frequency Body Acceleration - Mean() Frequency Z axis
freqBodyAccelJerk-mean-X	Frequency Body Acceleration Jerk - Mean() X axis
freqBodyAccelJerk-mean-Y	Frequency Body Acceleration Jerk - Mean() Y axis
freqBodyAccelJerk-mean-Z	Frequency Body Acceleration Jerk - Mean() Z axis

Column Name	Column Description
freqBodyAccelJerk-std-X	Frequency Body Acceleration Jerk - StandardDeviation() X axis
freqBodyAccelJerk-std-Y	Frequency Body Acceleration Jerk - StandardDeviation() Y axis
freqBodyAccelJerk-std-Z	Frequency Body Acceleration Jerk - StandardDeviation() Z axis
freqBodyAccelJerk-meanFreq-X	Frequency Body Acceleration Jerk - Mean() Frequency X axis
freqBodyAccelJerk-meanFreq-Y	Frequency Body Acceleration Jerk - Mean() Frequency Y axis
freqBodyAccelJerk-meanFreq-Z	Frequency Body Acceleration Jerk - Mean() Frequency Z axis
freqBodyGyro-mean-X	Frequency Body Gyroscope - Mean() X axis
freqBodyGyro-mean-Y	Frequency Body Gyroscope - Mean() Y axis
freqBodyGyro-mean-Z	Frequency Body Gyroscope - Mean() Z axis
freqBodyGyro-std-X	Frequency Body Gyroscope - StandardDeviation() X axis
freqBodyGyro-std-Y	Frequency Body Gyroscope - StandardDeviation() Y axis
freqBodyGyro-std-Z	Frequency Body Gyroscope - StandardDeviation() Z axis
freqBodyGyro-meanFreq-X	Frequency Body Gyroscope - MeanFrequency() X axis
freqBodyGyro-meanFreq-Y	Frequency Body Gyroscope - MeanFrequency() Y axis
freqBodyGyro-meanFreq-Z	Frequency Body Gyroscope - MeanFrequency() Z axis
freqBodyAccelMag-mean	Frequency Body Acceleration Magnitude - Mean()
freqBodyAccelMag-std	Frequency Body Acceleration Magnitude - Frequency()
freqBodyAccelMag-meanFreq	Frequency Body Acceleration Magnitude - MeanFrequency()
freqBodyBodyAccelJerkMag-mean	Frequency Body Body Acceleration Jerk Magnitude - Mean()
freqBodyBodyAccelJerkMag-std	Frequency Body Body Acceleration Jerk Magnitude - StandardDeviation()
freqBodyBodyAccelJerkMag-meanFreq	Frequency Body Body Acceleration Jerk Magnitude - MeanFrequency()
freqBodyBodyGyroMag-mean	Frequency Body Body Gyroscope Magnitude - Mean()
freqBodyBodyGyroMag-std	Frequency Body Body Gyroscope Magnitude StandardDeviation()
freqBodyBodyGyroMag-meanFreq	Frequency Body Body Gyroscope Magnitude - MeanFrequency()
freqBodyBodyGyroJerkMag-mean	Frequency Body Body Gyroscope Jerk Magnitude - Mean()
freqBodyBodyGyroJerkMag-std	Frequency Body Body Gyroscope Jerk Magnitude - StandardDeviation()
freqBodyBodyGyroJerkMag-meanFreq	Frequency Body Body Gyroscope Jerk Magnitude - MeanFrequency()
angle-timeBodyAccelMean_gravity	Angular(Time Body Acceleration - Mean Gravity)
angle-timeBodyAccelJerkMean_gravityMean	Angular(Time_Body_Acceleration_Jerk - Mean Gravity Mean)
angle-timeBodyGyroMean-gravityMean	Angular(Time Body Gyroscope Mean Gravity Mean)
angle-timeBodyGyroJerkMean_gravityMean	Angular(Time Body Gyroscope Jerk Mean Gravity Mean)
angle-X_gravityMean	Angular(X Axis, GravityMean)
angle-Y_gravityMean	Angular(Y Axis, GravityMean)
angle-Z_gravityMean	Angular(Z Axis, GravityMean)