

Data Dictionary for Tidy Data from HAR data

All summarized data represent means of numbers, which are originally means and standard deviations

column name	Description
Subject	Person who was measured, a number
Activity	One of 6 activities: WALKING, WALKING_UPSTAIRS, WALKING_DOWNSTAIRS, SITTING, STANDING, LAYING
Measurement_Type	Either Accelerometer or Gyroscope
mean.X	X axis measurement mean
mean.Y	Y axis measurement mean
mean.Z	Z axis measurement mean
std.X	X axis measurement standard deviation
std.Y	Y axis measurement standard deviation
std.Z	Z axis measurement standard deviation
Mag.mean	Mean of magnitude of 3-dimensional signals calculated using the Euclidian norm
Mag.std	Standard deviation of magnitude of 3-dimensional signals calculated using the Euclidian norm
The jerk measurements use a derivative with respect to time, dx/dt, to expose the rate of change	
Jerk.mean.X	X axis measurement mean
Jerk.mean.Y	Y axis measurement mean
Jerk.mean.Z	Z axis measurement mean
Jerk.std.X	X axis measurement standard deviation
Jerk.std.Y	Y axis measurement standard deviation
Jerk.std.Z	Z axis measurement standard deviation
Jerk.Mag.mean	Mean of magnitude of 3-dimensional signals calculated using the Euclidian norm
Jerk.Mag.std	Standard deviation of magnitude of 3-dimensional signals calculated using the Euclidian norm

NOTES:

This dataset was extremely complex but possibly not so very useful.

In particular, there is a large set of Fast Fourier Transform (FFT) that may be not very valid, thus excluded.

The data listed as Gravity were just taken from the Accelerometer readings, leaving Body.

All the item shown in this resulting dataset are Time Domain Body values.

Measurements are taken in 3 directions, X, Y, and Z.

The Magnitude is taken on the 3-dimensional signals calculated using the Euclidian norm

All the measurements shown are means taken over the groupings of Subject, Activity, and Measurement Type.
Some of the original numbers are means and some are standard deviations, all normalised;
all the numbers in this dataset are means of those observations