Code Book – UCI HAR Dataset & run\_analysis() Output

Data is organized in the following order in a tidy data format, with summary value for each subject and each of the subject’s activities.

Subject 1

Number corresponds to experimenter’s coding of test subjects. Values run

from 1 to 30

ActivityName 6

Value is character string corresponding to the user’s activity during the

Experiments.

1. Walking
2. Walking\_Upstairs
3. Walking\_Downstairs
4. Sitting
5. Standing
6. Laying

tBodyAccelMeanX 1

Mean Value of the X-Axis of the Body Accelerometer. Measured in Radians/ sec2

tBodyAccelMeanY 1

Mean Value of the Y-Axis of the Body Accelerometer. Measured in Radians/ sec2

tBodyAccelMeanZ 1

Mean Value of the Z-Axis of the Body Accelerometer. Measured in Radians/ sec2

tBodyAccelStdX 1

Standard deviaton of the X-Axis of the Body Accelerometer measurements. Measured in Radians/ sec2

tBodyAccelStdY 1

Standard deviaton of the Y-Axis of the Body Accelerometer measurements. Measured in Radians/ sec2

tBodyAccelStdZ 1

Standard deviaton of the Z-Axis of the Body Accelerometer measurements. Measured in Radians/ sec2

tGravityAccelMeanX 1

Mean value of the X-Axis of the Accelerometer measurements. Measured in “g” units

tGravityAccelMeanY 1

Mean value of the Y-Axis of the Accelerometer measurements. Measured in “g” units

tGravityAccelMeanZ 1

Mean value of the Z-Axis of the Accelerometer measurements. Measured in “g” units

tGravityAccelStdX 1

Standard deviation of the X-Axis of the Accelerometer measurements. Measured in “g” units

tGravityAccelStdY 1

Standard deviation of the Y-Axis of the Accelerometer measurements. Measured in “g” units

tGravityAccelStdZ

Mean value of the Z-Axis of the Accelerometer measurements. Measured in “g” units

tBodyAccelJerkMeanX 1

Mean Value of the X-Axis of the Body Accelerometer when jerked. Measured in Radians/ sec2

tBodyAccelJerkMeanY 1

Mean Value of the Y-Axis of the Body Accelerometer when jerked. Measured in Radians/ sec2

tBodyAccelJerkMeanZ 1

Mean Value of the Z-Axis of the Body Accelerometer when jerked. Measured in Radians/ sec2

tBodyAccelJerkStdX 1

Standard deviation of the X-Axis of the Body Accelerometer when jerked. Measured in Radians/ sec2

tBodyAccelJerkStdY 1

Standard deviation of the Y-Axis of the Body Accelerometer when jerked. Measured in Radians/ sec2

tBodyAccelJerkStdZ 1

Standard deviation of the X-Axis of the Body Accelerometer when jerked. Measured in Radians/sec2

tBodyGyroMeanX 1

Mean value of the X-axis Body Gyroscope. Measured in Radians/sec2

tBodyGyroMeanY 1

Mean value of the Y-axis Body Gyroscope. Measured in Radians/sec2

tBodyGyroMeanZ 1

Mean value of the Z-axis Body Gyroscope. Measured in Radians/sec2

tBodyGyroStdX 1

Standard deviation of the X-axis Body Gyroscope. Measured in Radians/sec2

tBodyGyroStdY 1

Standard deviation of the Y-axis Body Gyroscope. Measured in Radians/sec2

tBodyGyroStdZ 1

Standard deviation of the Z-axis Body Gyroscope. Measured in Radians/sec2

tBodyGyroJerkMeanX 1

Mean value of the X-axis Body Gyroscope when jerked. Measured in Radians/sec2

tBodyGyroJerkMeanY 1

Mean value of the Y-axis Body Gyroscope when jerked. Measured in Radians/sec2

tBodyGyroJerkMeanZ 1

Mean value of the Z-axis Body Gyroscope when jerked. Measured in Radians/sec2

tBodyGyroJerkStd 1

Standard deviation of the X-axis Body Gyroscope when jerked. Measured in Radians/sec2

tBodyGyroJerkStdY 1

Standard deviation of the Y-axis Body Gyroscope when jerked. Measured in Radians/sec2

tBodyGyroJerkStdZ 1

Standard deviation of the Z-axis Body Gyroscope when jerked. Measured in Radians/sec2

tBodyAccelMagMean 1

Mean value of the magnitude of the Body Accelerometer measurement. Measured in Radians.

tBodyAccelMagStd 1

Standard deviation of the magnitude of the Body Accelerometer measurement. Measured in Radians.

tGravityAccelMagMean

Mean value of the magnitude of the Body Accelerometer measurement. Measured in “g” units.

tBodyAccelMagStd 1

Standard devation of the magnitude of the Body Accelerometer measurement. Measured in “g” units.

tBodyAccelJerkMean 1

Mean Value of all components of the Body Accelerometer when jerked. Measured in Radians/ sec2

tBodyAccelJerkStd 1

Standard deviation of all components of the Body Accelerometer when jerked. Measured in Radians/ sec2

tBodyGyroMagMean 1

Mean value of the magnitude of the Body Gyroscope measurements. Measured in Radians.

tBodyGyroMagStd 1

Standard deviation of the magnitude of the Body Gyroscope measurements. Measured in Radians.

tBodyGyroJerkMagMean 1

Mean value of the magnitude of the Body Gyroscope measurements when jerked. Measured in Radians.

tBodyGyroJerkMagStd 1

Standard deviation of the magnitude of the Body Gyroscopes measurements. Measured in Radians.

fBodyAccelMeanX 1

Mean value of the X-axis of the Fourier transformed Body Accelerometer Measurements. Measured in Radians/sec2.

fBodyAccelMeanY 1

Mean value of the Y-axis of the Fourier transformed Body Accelerometer Measurements. Measured in Radians/sec2.

fBodyAccelMeanZ 1

Mean value of the Z-axis of the Fourier transformed Body Accelerometer Measurements. Measured in Radians/sec2.

fBodyAccelStdX 1

Standard Deviation of the X-axis of the Fourier transformed Body Accelerometer Measurements. Measured in Radians/sec2.

fBodyAccelStdY 1

Standard Deviation of the Y-axis of the Fourier transformed Body Accelerometer Measurements. Measured in Radians/sec2.

fBodyAccelStdZ 1

Standard Deviation of the Z-axis of the Fourier transformed Body Accelerometer Measurements. Measured in Radians/sec2.

fBodyAccelJerkMeanX 1

Mean Value of the X-axis of the Fourier transformed Body Accelerometer Measurements when jerked. Measured in Radians/sec2.

fBodyAccelJerkMeanY 1

Mean Value of the Y-axis of the Fourier transformed Body Accelerometer Measurements when jerked. Measured in Radians/sec2.

fBodyAccelJerkMeanZ 1

Mean Value of the Z-axis of the Fourier transformed Body Accelerometer Measurements when jerked. Measured in Radians/sec2.

fBodyAccelJerkStdX 1

Standard deviation of the X-axis of the Fourier transformed Body Accelerometer Measurements when jerked. Measured in Radians/sec2.

fBodyAccelJerkStdY 1

Standard deviation of the Y-axis of the Fourier transformed Body Accelerometer Measurements when jerked. Measured in Radians/sec2.

fBodyAccelJerkStdZ 1

Standard deviation of the Z-axis of the Fourier transformed Body Accelerometer Measurements when jerked. Measured in Radians/sec2.

fBodyGyroMeanX 1

Mean value of the X-axis of the Fourier transformed Body Gyroscope Measurements. Measured in Radians/sec2.

fBodyGyroMeanY 1

Mean value of the Y-axis of the Fourier transformed Body Gyroscope Measurements. Measured in Radians/sec2.

fBodyGyroMeanZ 1

Mean value of the Z-axis of the Fourier transformed Body Gyroscope Measurements. Measured in Radians/sec2.

fBodyGyroStdX 1

Standard deviation of the X-axis of the Fourier transformed Body Gyroscope Measurements. Measured in Radians/sec2.

fBodyGyroStdY 1

Standard deviation of the Y-axis of the Fourier transformed Body Gyroscope Measurements. Measured in Radians/sec2.

fBodyGyroStdZ 1

Standard deviation of the Z-axis of the Fourier transformed Body Gyroscope Measurements. Measured in Radians/sec2.

fBodyAccelMagMean 1

Mean value of the Fourier transformed magnitude of all components of the Body Accelerometer. Measured in Radians/sec2.

"BodyAccelMagStd 1

Mean value of the Fourier transformed magnitude of all components of the Body Accelerometer. Measured in Radians/sec2.

fBodyAccelJerkMagMean 1

Mean value of the Fourier transformed magnitude of all components of the Body Accelerometer when jerked. Measured in Radians/sec2.

fBodyAccelJerkMagStd 1

Standard deviation of the Fourier transformed magnitude of all components of the Body Accelerometer when jerked. Measured in Radians/sec2.

fBodyGyroMagMean 1

Mean value of the Fourier transformed magnitude of all components of the Body Gyroscope. Measured in Radians/sec2.

fBodyGyroMagStd 1

Standard deviation of the Fourier transformed magnitude of all components of the Body Gyroscope. Measured in Radians/sec2.

fBodyGyroJerkMagMean 1

Mean value of the Fourier transformed magnitude of all components of the Body Gyroscope when jerked. Measured in Radians/sec2.

fBodyGyroJerkMagStd 1

Standard deviation of the Fourier transformed magnitude of all components of the Body Gyroscope when jerked. Measured in Radians/sec2.