Coursera Data Science - Getting and Cleaning Data

HCI Data Analysis - Codebook

The features in this data set have been taken from a study collecting accelerometer and gyroscope data. There were 30 participants and the measurements have been taken whilst they have been doing various activities, walking, sitting etc.

The data set shows the mean for each measurement against subject, activity listed below.

Name	Type	Description	Values
Subject	integer	The ID of the subject	1-30
Activity	character	The type of activity the subject was doing	Laying Sitting Standing Walking Walking_Downstairs Walking_Upstairs
tBodyAccMeanX	numeric	The x axis body acceleration mean	
tBodyAccMeanY	numeric	The y axis body acceleration mean	
tBodyAccMeanZ	numeric	The z axis body acceleration mean	
tBodyAccStdX	numeric	The x axis body acceleration standard deviation	
tBodyAccStdY	numeric	The y axis body acceleration standard deviation	
tBodyAccStdZ	numeric	The z axis body acceleration standard deviation	
tGravityAccMeanX	numeric	The x axis gravitational acceleration mean	
tGravityAccMeanY	numeric	The y axis gravitational acceleration mean	
tGravityAccMeanZ	numeric	The z axis gravitational acceleration mean	
tGravityAccStdX	numeric	The x axis gravitational acceleration standard deviation	
tGravityAccStdY	numeric	The y axis gravitational acceleration standard deviation	
tGravityAccStdZ	numeric	The z axis gravitational acceleration standard deviation	
tBodyAccJerkMeanX	numeric	The x axis acceleration jerk mean	

Name	Type	Description	Values
tBodyAccJerkMeanY	numeric	The y axis acceleration jerk mean	
tBodyAccJerkMeanZ	numeric	The z axis acceleration jerk mean	
tBodyAccJerkStdX	numeric	The x axis acceleration jerk standard deviation	
tBodyAccJerkStdY	numeric	The y axis acceleration jerk standard deviation	
tBodyAccJerkStdZ	numeric	The z axis acceleration jerk standard deviation	
tBodyGyroMeanX	numeric	The x axis gyroscope mean	
tBodyGyroMeanY	numeric	The y axis gyroscope mean	
tBodyGyroMeanZ	numeric	The z axis gyroscope mean	
tBodyGyroStdX	numeric	The x axis standard deviation	
tBodyGyroStdY	numeric	The y axis standard deviation	
tBodyGyroStdZ	numeric	The z axis standard deviation	
tBodyGyroJerkMeanX	numeric	The x axis gyroscope jerk mean	
tBodyGyroJerkMeanY	numeric	The y axis gyroscope jerk mean	
tBodyGyroJerkMeanZ	numeric	The z axis gyroscope jerk mean	
tBodyGyroJerkStdX	numeric	The x axis gyroscope jerk standard deviation	
tBodyGyroJerkStdY	numeric	The y axis gyroscope jerk standard deviation	
tBodyGyroJerkStdZ	numeric	The z axis gyroscope jerk standard deviation	
tBodyAccMagMean	numeric	The mean acceleration magnitude	
tBodyAccMagStd	numeric	The standard deviation of acceleration magnitude	
tGravityAccMagMean	numeric	The mean gravitational acceleration magnitude	
tGravityAccMagStd	numeric	The standard deviation of gravitational acceleration magnitude	
tBodyAccJerkMagMean	numeric	The mean of the acceleration jerk magnitude	
tBodyAccJerkMagStd	numeric	The standard deviation of acceleration jerk magnitude	
tBodyGyroMagMean	numeric	The mean of the gyroscope magnitude	

Name	Type	Description	Values
tBodyGyroMagStd	numeric	The standard deviation of the gyroscope	
tBodyGyroJerkMagMean	numeric	The mean magnitude of the gyroscope jerk	
tBodyGyroJerkMagStd	numeric	The standard deviation of the gyroscope jerk magnitude	
fBodyAccMeanX	numeric	The x axis mean of the acceleration	
fBodyAccMeanY	numeric	The y axis mean of the acceleration	
fBodyAccMeanZ	numeric	The z axis mean of the acceleration	
fBodyAccStdX	numeric	The x axis standard deviation of acceleration	
fBodyAccStdY	numeric	The y axis standard deviation of acceleration	
fBodyAccStdZ	numeric	The z axis standard deviation of acceleration	
fBodyAccMeanFreqX	numeric	The x axis mean of the acceleration frequency	
fBodyAccMeanFreqY	numeric	The y axis mean of the acceleration frequency	
fBodyAccMeanFreqZ	numeric	The z axis mean of the acceleration frequency	
fBodyAccJerkMeanX	numeric	The x axis mean of the acceleration jerk	
fBodyAccJerkMeanY	numeric	The y axis mean of the acceleration jerk	
fBodyAccJerkMeanZ	numeric	The z axis mean of the acceleration jerk	
fBodyAccJerkStdX	numeric	The x axis standard deviation of the acceleration jerk	
fBodyAccJerkStdY	numeric	The y axis standard deviation of the acceleration jerk	
fBodyAccJerkStdZ	numeric	The z axis standard deviation of the acceleration jerk	
fBodyAccJerkMeanFreqX	numeric	The x axis mean of the acceleration jerk frequency	
fBodyAccJerkMeanFreqY	numeric	The y axis mean of the acceleration jerk frequency	
fBodyAccJerkMeanFreqZ	numeric	The z axis mean of the acceleration jerk frequency	

Name	Type	Description	Values
fBodyGyroMeanX	numeric	The x axis mean of the gyroscope	
fBodyGyroMeanY	numeric	The y axis mean of the gyroscope	
fBodyGyroMeanZ	numeric	The z axis mean of the gyroscope	
fBodyGyroStdX	numeric	The x axis standard deviation of the gyroscope	
fBodyGyroStdY	numeric	The y axis standard deviation of the gyroscope	
fBodyGyroStdZ	numeric	The z axis standard deviation of the gyroscope	
fBodyGyroMeanFreqX	numeric	The x axis mean of the gyroscope frequency	
fBodyGyroMeanFreqY	numeric	The y axis mean of the gyroscope frequency	
fBodyGyroMeanFreqZ	numeric	The z axis mean of the gyroscope frequency	
fBodyAccMagMean	numeric	The mean of the acceleration magnitude	
fBodyAccMagStd	numeric	The standard deviation of the acceleration magnitude	
fBodyAccMagMeanFreq	numeric	The mean of the acceleration magnitude frequency	
fBodyAccJerkMagMean	numeric	The mean of the acceleration jerk magnitude	
fBodyAccJerkMagStd	numeric	The standard deviation of the acceleration jerk magnitude	
fBodyAccJerkMagMeanFre	numeric	The mean of the acceleration jerk magnitude frequency	
fBodyGyroMagMean	numeric	The mean of the gyroscope magnitude	
fBodyGyroMagStd	numeric	The standard deviation of the gyroscope magnitude	
fBodyGyroMagMeanFreq	numeric	The mean of the gyroscope magnitude frequency	
fBodyGyroJerkMagMean	numeric	The mean of the gyroscope jerk magnitude	
fBodyGyroJerkMagStd	numeric	The standard deviation of the gyroscope jerk magnitude	
fBodyGyroJerkMagMeanFr	numeric	The mean of the gyroscope magnitude frequency	