Codebook for tidydata.txt

Overview

This dataset contains summarized information from raw data collected from the accelerometers from the Samsung Galaxy S smartphone with the mean of the mean and standard deviation variables from this data for each activity and each subject. This file has 9,954 records and can be read into R using the following command:

tidy.data<-read.table("tidydata.txt", header=TRUE)

Data

A full description is available at the site where the data was obtained:

http://archive.ics.uci.edu/ml/datasets/Human+Activity+Recognition+Using+Smartphones

The exact copy of the data used was provided by the instructors for John's Hopkins Bloomberg School of Public Health "Getting and Cleaning Data" course. A copy of the data in .zip file form is available at:

https://d396qusza40orc.cloudfront.net/getdata%2Fprojectfiles%2FUCI%20HAR%20Dataset.zip

Processing

This tidydata.txt file was created from the raw data with a R script called run_analysis.R. Details on this script can be found at:

<insert link to script on the repo>

Data Fields and Values

subject

This is a numeric code from 1 to 30 representing the individual that generated the metrics in the data

activity.label

This is the type of activity being done while the measurements were taken. Possible values include:

LAYING

SITTING

STANDING

WALKING

WALKING_DOWNSTAIRS

WALKING_UPSTAIRS

variable

This is the type of measurement represented by the record. There are 79 possible values for this variable:

tBodyAcc.mean.X

tBodyAcc.mean.Y

tBodyAcc.mean.Z

tGravityAcc.mean.X

tGravityAcc.mean.Y

tGravityAcc.mean.Z

tBodyAccJerk.mean.X

tBodyAccJerk.mean.Y

tBodyAccJerk.mean.Z

tBodyGyro.mean.X

tBodyGyro.mean.Y

tBodyGyro.mean.Z

tBodyGyroJerk.mean.X

tBodyGyroJerk.mean.Y

tBodyGyroJerk.mean.Z

tBodyAccMag.mean.

tGravityAccMag.mean.

tBodyAccJerkMag.mean.

tBodyGyroMag.mean.

tBodyGyroJerkMag.mean.

fBodyAcc.mean.X

fBodyAcc.mean.Y

fBodyAcc.mean.Z

fBodyAcc.meanFreq.X

fBodyAcc.meanFreq.Y

fBodyAcc.meanFreq.Z

fBodyAccJerk.mean.X

fBodyAccJerk.mean.Y

fBodyAccJerk.mean.Z

fBodyAccJerk.meanFreq.X

fBodyAccJerk.meanFreq.Y

fBodyAccJerk.meanFreq.Z

fBodyGyro.mean.X

fBodyGyro.mean.Y

fBodyGyro.mean.Z

fBodyGyro.meanFreq.X

fBodyGyro.meanFreq.Y

fBodyGyro.meanFreq.Z

fBodyAccMag.mean.

fBodyAccMag.meanFreq.

fBodyBodyAccJerkMag.mean.

fBodyBodyAccJerkMag.meanFreq.

fBodyBodyGyroMag.mean.

fBodyBodyGyroMag.meanFreq.

fBodyBodyGyroJerkMag.mean.

fBodyBodyGyroJerkMag.meanFreq.

tBodyAcc.std.X

tBodyAcc.std.Y

tBodyAcc.std.Z

tGravityAcc.std.X

tGravityAcc.std.Y

tGravityAcc.std.Z

tBodyAccJerk.std.X

tBodyAccJerk.std.Y

tBodyAccJerk.std.Z

tBodyGyro.std.X

tBodyGyro.std.Y

tBodyGyro.std.Z

tBodyGyroJerk.std.X

tBodyGyroJerk.std.Y

tBodyGyroJerk.std.Z

tBodyAccMag.std.

tGravityAccMag.std.

tBodyAccJerkMag.std.

tBodyGyroMag.std.

tBodyGyroJerkMag.std.

fBodyAcc.std.X

fBodyAcc.std.Y

fBodyAcc.std.Z

fBodyAccJerk.std.X

fBodyAccJerk.std.Y

fBodyAccJerk.std.Z

fBodyGyro.std.X

fBodyGyro.std.Y

fBodyGyro.std.Z

fBodyAccMag.std.

fBodyBodyAccJerkMag.std.

fBodyBodyGyroMag.std.

fBodyBodyGyroJerkMag.std.

value

This represents the metrics collected by the accelerometers. These values are the average of all the data collected for each subject for each activity. Additional information on the collection and processing of the raw data of these observations can be found at the data source noted above.