CleaningData Final Project Codebook

Me

August 10, 2019

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Origin of Data

The data in the set were collected by Samsung as part of a study on their accelerometer. The data were collected from 30 people, ages 19-48. Each person performed six activities (WALKING, WALKING_UPSTAIRS, WALKING_DOWNSTAIRS, SITTING, STANDING, LAYING) while wearing a smartphone. Accelerometer and gyroscopic data were collected.

Sensor signals included motion information in three directions (x, y, z).

This work extracts mean and standard deviation from the x, y, and z data and then further processes it to generate information for each subject on their average x, y and z accelerometer readings while performing each activity. The resulting data are recorded in this file:

summarydata.txt

Structure of data output

The following files are included in this output:

This codebook README.txt summarydata.txt run_analysis.R

Documentation of run_analysis.R is included in the readme file.

The format of the summarydata.txt file is as follows:

There are eighty-one variables:

subject- an integer designating the assigned subject id. The range is 1-30

activity- factor variable describing the activity observed in each record. The possible values are WALKING, WALKING_UPSTAIRS, WALKING_DOWNSTAIRS, SITTING, STANDING, LAYING.

The following 79 variables are means taken across all observations of the same combination of subject and activity.

“tbodyaccmeanx” “tbodyaccmeany”
“tbodyaccmeanz” “tbodyaccstdx”
“tbodyaccstdy” “tbodyaccstdz”
“tgravityaccmeanx” “tgravityaccmeany”
“tgravityaccmeanz” “tgravityaccstdx”
“tgravityaccstdy” “tgravityaccstdz”
“tbodyaccjerkmeanx” “tbodyaccjerkmeany”
“tbodyaccjerkmeanz” “tbodyaccjerkstdx”
“tbodyaccjerkstdy” “tbodyaccjerkstdz”
“tbodygyromeanx” “tbodygyromeany”
“tbodygyromeanz” “tbodygyrostdx”
“tbodygyrostdy” “tbodygyrostdz”
“tbodygyrojerkmeanx” “tbodygyrojerkmeany”
“tbodygyrojerkmeanz” “tbodygyrojerkstdx”
“tbodygyrojerkstdy” “tbodygyrojerkstdz”
“tbodyaccmagmean” “tbodyaccmagstd”

“tgravityaccmagmean” “tgravityaccmagstd”
“tbodyaccjerkmagmean” “tbodyaccjerkmagstd”
“tbodygyromagmean” “tbodygyromagstd”
“tbodygyrojerkmagmean” “tbodygyrojerkmagstd”
“fbodyaccmeanx” “fbodyaccmeany”
“fbodyaccmeanz” “fbodyaccstdx”
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“fbodyaccmeanfreqx” “fbodyaccmeanfreqy”
“fbodyaccmeanfreqz” “fbodyaccjerkmeanx”
“fbodyaccjerkmeany” “fbodyaccjerkmeanz”
“fbodyaccjerkstdx” “fbodyaccjerkstdy”
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“fbodyaccjerkmeanfreqy” “fbodyaccjerkmeanfreqz”
“fbodygyromeanx” “fbodygyromeany”
“fbodygyromeanz” “fbodygyrostdx”
“fbodygyrostdy” “fbodygyrostdz”
“fbodygyromeanfreqx” “fbodygyromeanfreqy”
“fbodygyromeanfreqz” “fbodyaccmagmean”
“fbodyaccmagstd” “fbodyaccmagmeanfreq”
“fbodybodyaccjerkmagmean” “fbodybodyaccjerkmagstd”
“fbodybodyaccjerkmagmeanfreq” “fbodybodygyromagmean”
“fbodybodygyromagstd” “fbodybodygyromagmeanfreq”
“fbodybodygyrojerkmagmean” “fbodybodygyrojerkmagstd”
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