

# Codebook for tidy\_data

## Autogenerated data summary from dataMaid

Doron Fingold

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### Project Description

The purpose of this project is to demonstrate ability to collect, work with, and clean a data set. The goal is to prepare tidy data that can be used for later analysis.

### Data processing

#### Collection of the raw data

As per the project instructions the raw data was collected from the following URL: <https://d396qusza40orc.cloudfront.net/getdata%2Fprojectfiles%2FUCI%20HAR%20Dataset.zip>

the zip file contained the following related files. Observations in 'Inertial Signals' directories have been excluded from this task.

- 'README.txt': overview of experiment and descriptions of files included
- 'features\_info.txt': Shows information about the variables used on the feature vector.
- 'features.txt': List of all features.
- 'activity\_labels.txt': Links the class labels with their activity name.
- 'train/X\_train.txt': Training set.
- 'train/y\_train.txt': Training labels.
- 'test/X\_test.txt': Test set.
- 'test/y\_test.txt': Test labels.

The following files are available for the train and test data. Their descriptions are equivalent.

- 'train/subject\_train.txt': Each row identifies the subject who performed the activity for each window sample. Its range is from 1 to 30.

It was collected and used for the following publication Davide Anguita, Alessandro Ghio, Luca Oneto, Xavier Parra and Jorge L. Reyes-Ortiz. Human Activity Recognition on Smartphones using a Multiclass Hardware-Friendly Support Vector Machine. International Workshop of Ambient Assisted Living (IWAAL 2012). Vitoria-Gasteiz, Spain. Dec 2012

- Variables starting with 't' are measurements of time captured at a constant rate of 50 Hz. Then they were filtered using a median filter and a 3rd order low pass Butterworth filter with a corner frequency of 20 Hz to remove noise.
- Variables starting with 'f' had Fast Fourier Transform (FFT) applied to them and a measurement of frequency.
- Features are normalized and bounded within [-1,1].
- Each feature vector is a row on the text file.

## Creating the tidy datafile

All raw data came in txt files in space separated values format. a total of 6 files needed to be assembled. 3 train files and 3 test files. both test and train files have the same number of variables. The data came without headers. Feature labels from `features.txt` were used as variable names. for `subject_test.txt` and `subject_train.txt`, code and subject\_id was used as variable names. for `y_test.txt` and `y_train.txt`, code and activity was used. the 3 files for each group were loaded into data tables and bind together using `cbind`, and then merged using `rbind`. more details can be find in the `README.md` file under the section for the **`assemble_data`** function. The data included 561 feature observations as well as subject\_id and activity. the instruction was to only consider the mean and standard deviation variables. those were identified by the variable labels that ended with `'mean()'` and `'std()'`. for example, `'tBodyAccJerk-mean()-X'` `'tBodyGyroJerkMag-std()'`. note that `'meanFreq()'` was excluded as it was not clear from the instructions that it is needed. Regex was used in the function **`select_columns`** to select the mean and standard deviation variables. Activity values were coded from 1 to 6 and were identified in the `activity-labels.txt` as follows: 1 WALKING 2 WALKING\_UPSTAIRS 3 WALKING\_DOWNSTAIRS 4 SITTING 5 STANDING 6 LAYING

Using **`factor_activities`** the codes were transformed to the corresponding labels and were lower-cased. the feature labels included of a mix of uppercase and lowercase as well as including dashes and parenthesis. `janitor::make_clean_names` was used remove symbols. Capital letters are assumed to be new word and `_` is added in front of it. All capital letters are transformed to lower case. transforming abbreviation of the prefixes `'t'` and `'f'` was done so that `'time'` and `'freq'` was used instead.

the following variables name parts remained abbreviate for the length sake: - `'acc'` for accelerometer - `'freq'` for frequency - `'std'` for standard deviation - `'gyro'` for gyroscope - `'mag'` for magnitude

## Guide to create the tidy data file

to reproduce this tidy procedure follow the instructions in **`README.md`** sections **Setup** and **Run Analysis**

## Data report overview

The dataset examined has the following dimensions:

Feature	Result
Number of observations	10299
Number of variables	68

## Codebook summary table

Label	Variable	Class	# unique values	Missing	Description
	<code>subject_id</code>	integer	30	0.00 %	
	<code>activity</code>	factor	6	0.00 %	
	<code>time_body_acc_mean_x</code>	numeric	10292	0.00 %	
	<code>time_body_acc_mean_y</code>	numeric	10299	0.00 %	
	<code>time_body_acc_mean_z</code>	numeric	10293	0.00 %	
	<code>time_body_acc_std_x</code>	numeric	10295	0.00 %	
	<code>time_body_acc_std_y</code>	numeric	10297	0.00 %	
	<code>time_body_acc_std_z</code>	numeric	10297	0.00 %	
	<code>time_gravity_acc_mean_x</code>	numeric	10296	0.00 %	
	<code>time_gravity_acc_mean_y</code>	numeric	10298	0.00 %	
	<code>time_gravity_acc_mean_z</code>	numeric	10299	0.00 %	
	<code>time_gravity_acc_std_x</code>	numeric	10288	0.00 %	

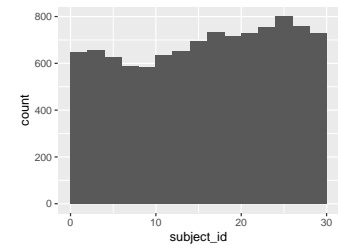
Label	Variable	Class	# unique values	Missing	Description
	time_gravity_acc_std_y	numeric	10293	0.00 %	
	time_gravity_acc_std_z	numeric	10296	0.00 %	
	time_body_acc_jerk_mean_x	numeric	10299	0.00 %	
	time_body_acc_jerk_mean_y	numeric	10299	0.00 %	
	time_body_acc_jerk_mean_z	numeric	10299	0.00 %	
	time_body_acc_jerk_std_x	numeric	10290	0.00 %	
	time_body_acc_jerk_std_y	numeric	10296	0.00 %	
	time_body_acc_jerk_std_z	numeric	10293	0.00 %	
	time_body_gyro_mean_x	numeric	10298	0.00 %	
	time_body_gyro_mean_y	numeric	10299	0.00 %	
	time_body_gyro_mean_z	numeric	10297	0.00 %	
	time_body_gyro_std_x	numeric	10292	0.00 %	
	time_body_gyro_std_y	numeric	10296	0.00 %	
	time_body_gyro_std_z	numeric	10296	0.00 %	
	time_body_gyro_jerk_mean_x	numeric	10295	0.00 %	
	time_body_gyro_jerk_mean_y	numeric	10299	0.00 %	
	time_body_gyro_jerk_mean_z	numeric	10298	0.00 %	
	time_body_gyro_jerk_std_x	numeric	10292	0.00 %	
	time_body_gyro_jerk_std_y	numeric	10295	0.00 %	
	time_body_gyro_jerk_std_z	numeric	10291	0.00 %	
	time_body_acc_mag_mean	numeric	10296	0.00 %	
	time_body_acc_mag_std	numeric	10294	0.00 %	
	time_gravity_acc_mag_mean	numeric	10296	0.00 %	
	time_gravity_acc_mag_std	numeric	10294	0.00 %	
	time_body_acc_jerk_mag_mean	numeric	10292	0.00 %	
	time_body_acc_jerk_mag_std	numeric	10294	0.00 %	
	time_body_gyro_mag_mean	numeric	10298	0.00 %	
	time_body_gyro_mag_std	numeric	10298	0.00 %	
	time_body_gyro_jerk_mag_mean	numeric	10293	0.00 %	
	time_body_gyro_jerk_mag_std	numeric	10297	0.00 %	
	freq_body_acc_mean_x	numeric	10295	0.00 %	
	freq_body_acc_mean_y	numeric	10292	0.00 %	
	freq_body_acc_mean_z	numeric	10295	0.00 %	
	freq_body_acc_std_x	numeric	10294	0.00 %	
	freq_body_acc_std_y	numeric	10297	0.00 %	
	freq_body_acc_std_z	numeric	10296	0.00 %	
	freq_body_acc_jerk_mean_x	numeric	10293	0.00 %	
	freq_body_acc_jerk_mean_y	numeric	10296	0.00 %	
	freq_body_acc_jerk_mean_z	numeric	10294	0.00 %	
	freq_body_acc_jerk_std_x	numeric	10291	0.00 %	
	freq_body_acc_jerk_std_y	numeric	10294	0.00 %	
	freq_body_acc_jerk_std_z	numeric	10290	0.00 %	
	freq_body_gyro_mean_x	numeric	10297	0.00 %	
	freq_body_gyro_mean_y	numeric	10296	0.00 %	
	freq_body_gyro_mean_z	numeric	10297	0.00 %	
	freq_body_gyro_std_x	numeric	10297	0.00 %	
	freq_body_gyro_std_y	numeric	10293	0.00 %	
	freq_body_gyro_std_z	numeric	10295	0.00 %	
	freq_body_acc_mag_mean	numeric	10296	0.00 %	
	freq_body_acc_mag_std	numeric	10298	0.00 %	
	freq_body_body_acc_jerk_mag_mean	numeric	10290	0.00 %	
	freq_body_body_acc_jerk_mag_std	numeric	10296	0.00 %	
	freq_body_body_gyro_mag_mean	numeric	10297	0.00 %	
	freq_body_body_gyro_mag_std	numeric	10296	0.00 %	

Label	Variable	Class	# unique values	Missing	Description
	freq_body_body_gyro_jerk_mag_mean	numeric	10293	0.00 %	
	freq_body_body_gyro_jerk_mag_std	numeric	10292	0.00 %	

## Variable list

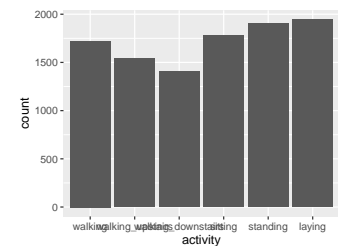
### subject\_id

Feature	Result
Variable type	integer
Number of missing obs.	0 (0 %)
Number of unique values	30
Median	17
1st and 3rd quartiles	9; 24
Min. and max.	1; 30



### activity

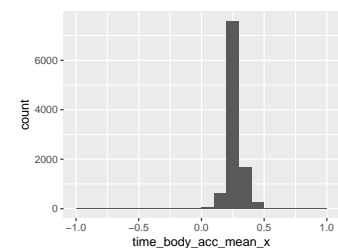
Feature	Result
Variable type	factor
Number of missing obs.	0 (0 %)
Number of unique values	6
Mode	"laying"
Reference category	walking



- Observed factor levels: "laying", "sitting", "standing", "walking", "walking\_downstairs", "walking\_upstairs".

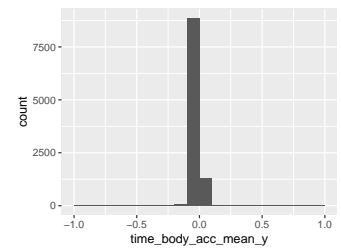
### time\_body\_acc\_mean\_x

Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	10292
Median	0.28
1st and 3rd quartiles	0.26; 0.29
Min. and max.	-1; 1



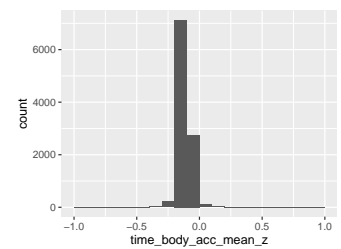
## time\_body\_acc\_mean\_y

Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	10299
Median	-0.02
1st and 3rd quartiles	-0.02; -0.01
Min. and max.	-1; 1



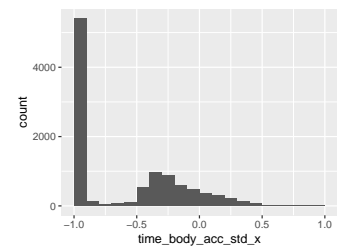
## time\_body\_acc\_mean\_z

Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	10293
Median	-0.11
1st and 3rd quartiles	-0.12; -0.1
Min. and max.	-1; 1



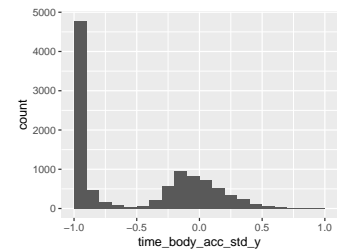
## time\_body\_acc\_std\_x

Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	10295
Median	-0.94
1st and 3rd quartiles	-0.99; -0.25
Min. and max.	-1; 1



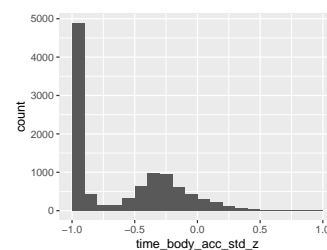
## time\_body\_acc\_std\_y

Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	10297
Median	-0.84
1st and 3rd quartiles	-0.98; -0.06
Min. and max.	-1; 1



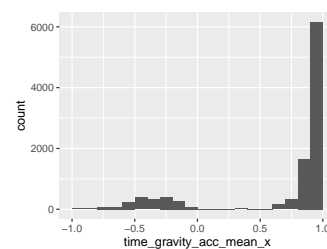
## time\_body\_acc\_std\_z

Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	10297
Median	-0.85
1st and 3rd quartiles	-0.98; -0.28
Min. and max.	-1; 1



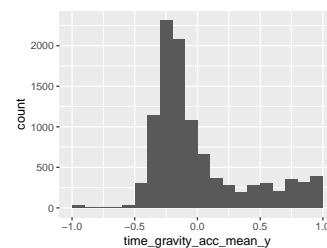
## time\_gravity\_acc\_mean\_x

Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	10296
Median	0.92
1st and 3rd quartiles	0.81; 0.95
Min. and max.	-1; 1



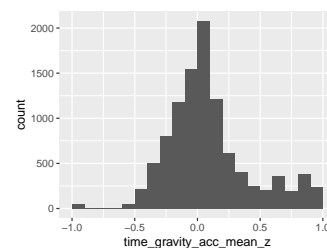
## time\_gravity\_acc\_mean\_y

Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	10298
Median	-0.14
1st and 3rd quartiles	-0.24; 0.12
Min. and max.	-1; 1



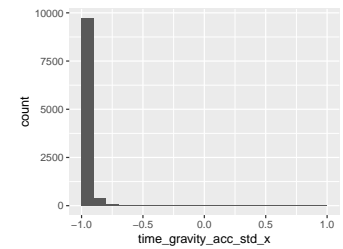
## time\_gravity\_acc\_mean\_z

Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	10299
Median	0.04
1st and 3rd quartiles	-0.12; 0.22
Min. and max.	-1; 1



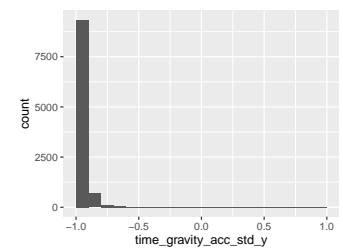
## time\_gravity\_acc\_std\_x

Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	10288
Median	-0.98
1st and 3rd quartiles	-0.99; -0.96
Min. and max.	-1; 1



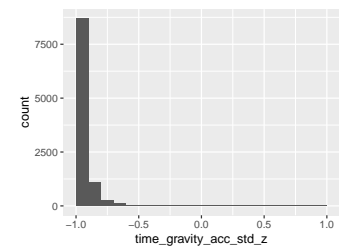
## time\_gravity\_acc\_std\_y

Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	10293
Median	-0.98
1st and 3rd quartiles	-0.99; -0.95
Min. and max.	-1; 1



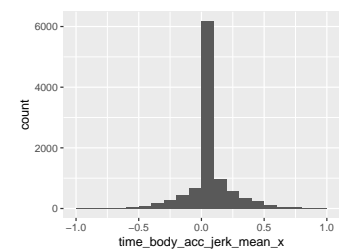
## time\_gravity\_acc\_std\_z

Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	10296
Median	-0.97
1st and 3rd quartiles	-0.99; -0.93
Min. and max.	-1; 1



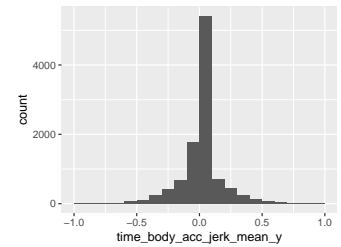
## time\_body\_acc\_jerk\_mean\_x

Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	10299
Median	0.08
1st and 3rd quartiles	0.06; 0.09
Min. and max.	-1; 1



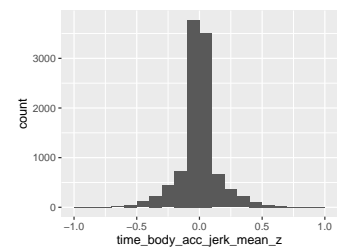
### time\_body\_acc\_jerk\_mean\_y

Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	10299
Median	0.01
1st and 3rd quartiles	-0.02; 0.03
Min. and max.	-1; 1



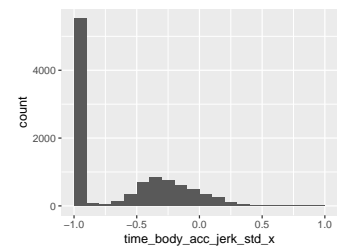
### time\_body\_acc\_jerk\_mean\_z

Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	10299
Median	0
1st and 3rd quartiles	-0.03; 0.02
Min. and max.	-1; 1



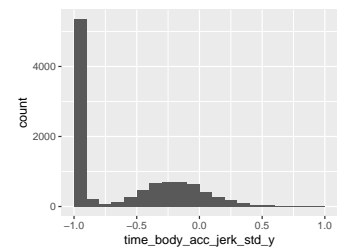
### time\_body\_acc\_jerk\_std\_x

Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	10290
Median	-0.95
1st and 3rd quartiles	-0.99; -0.29
Min. and max.	-1; 1



### time\_body\_acc\_jerk\_std\_y

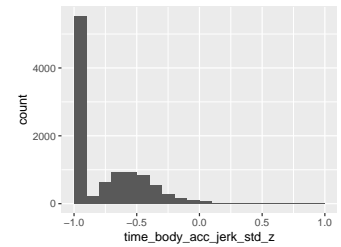
Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	10296
Median	-0.93
1st and 3rd quartiles	-0.99; -0.22
Min. and max.	-1; 1





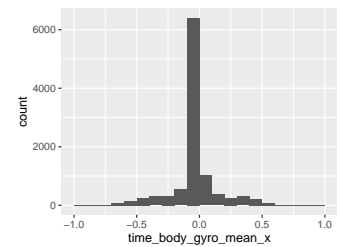
## time\_body\_acc\_jerk\_std\_z

Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	10293
Median	-0.95
1st and 3rd quartiles	-0.99; -0.55
Min. and max.	-1; 1



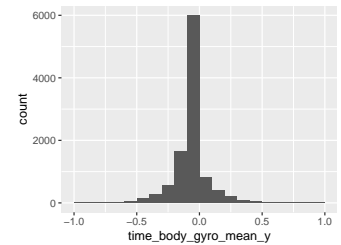
## time\_body\_gyro\_mean\_x

Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	10298
Median	-0.03
1st and 3rd quartiles	-0.05; -0.01
Min. and max.	-1; 1



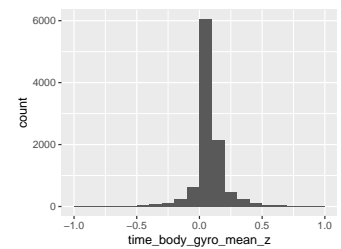
## time\_body\_gyro\_mean\_y

Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	10299
Median	-0.07
1st and 3rd quartiles	-0.1; -0.05
Min. and max.	-1; 1



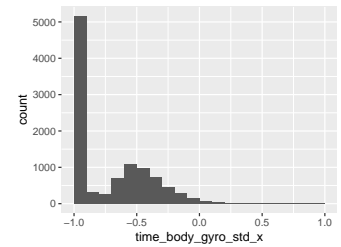
## time\_body\_gyro\_mean\_z

Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	10297
Median	0.09
1st and 3rd quartiles	0.06; 0.11
Min. and max.	-1; 1



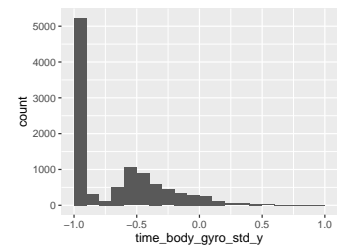
## time\_body\_gyro\_std\_x

Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	10292
Median	-0.9
1st and 3rd quartiles	-0.99; -0.48
Min. and max.	-1; 1



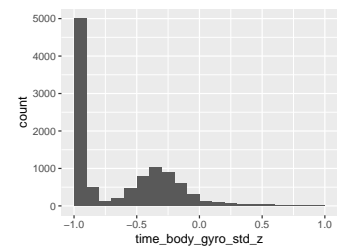
## time\_body\_gyro\_std\_y

Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	10296
Median	-0.91
1st and 3rd quartiles	-0.98; -0.45
Min. and max.	-1; 1



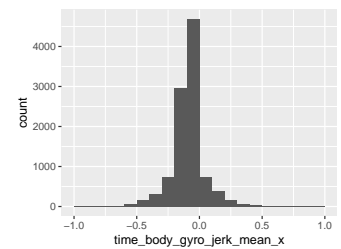
## time\_body\_gyro\_std\_z

Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	10296
Median	-0.88
1st and 3rd quartiles	-0.99; -0.34
Min. and max.	-1; 1



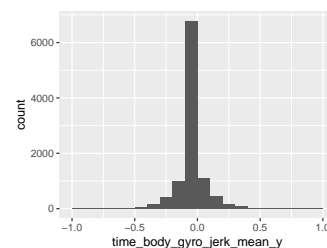
## time\_body\_gyro\_jerk\_mean\_x

Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	10295
Median	-0.1
1st and 3rd quartiles	-0.12; -0.08
Min. and max.	-1; 1



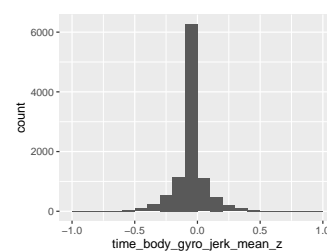
### time\_body\_gyro\_jerk\_mean\_y

Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	10299
Median	-0.04
1st and 3rd quartiles	-0.06; -0.03
Min. and max.	-1; 1



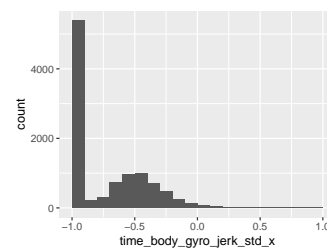
### time\_body\_gyro\_jerk\_mean\_z

Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	10298
Median	-0.05
1st and 3rd quartiles	-0.08; -0.03
Min. and max.	-1; 1



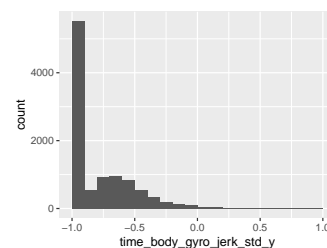
### time\_body\_gyro\_jerk\_std\_x

Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	10292
Median	-0.93
1st and 3rd quartiles	-0.99; -0.49
Min. and max.	-1; 1



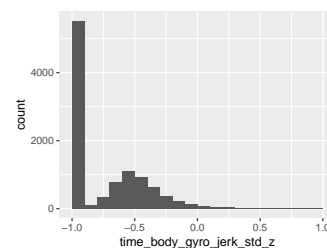
### time\_body\_gyro\_jerk\_std\_y

Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	10295
Median	-0.95
1st and 3rd quartiles	-0.99; -0.63
Min. and max.	-1; 1



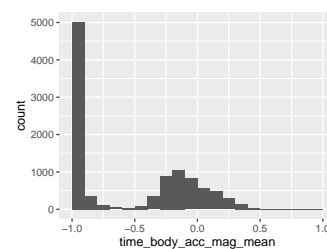
## time\_body\_gyro\_jerk\_std\_z

Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	10291
Median	-0.95
1st and 3rd quartiles	-0.99; -0.51
Min. and max.	-1; 1



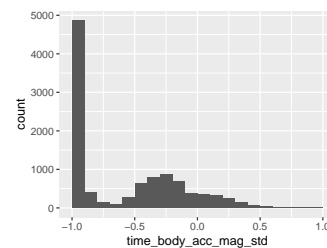
## time\_body\_acc\_mag\_mean

Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	10296
Median	-0.87
1st and 3rd quartiles	-0.98; -0.12
Min. and max.	-1; 1



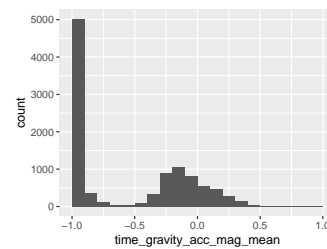
## time\_body\_acc\_mag\_std

Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	10294
Median	-0.84
1st and 3rd quartiles	-0.98; -0.24
Min. and max.	-1; 1



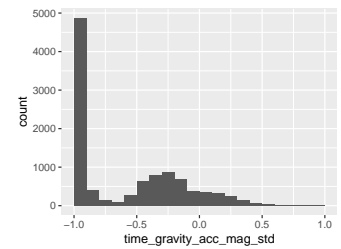
## time\_gravity\_acc\_mag\_mean

Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	10296
Median	-0.87
1st and 3rd quartiles	-0.98; -0.12
Min. and max.	-1; 1



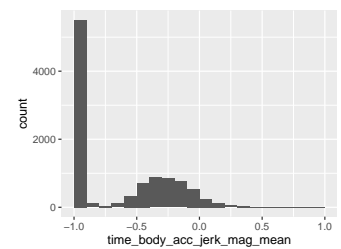
## time\_gravity\_acc\_mag\_std

Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	10294
Median	-0.84
1st and 3rd quartiles	-0.98; -0.24
Min. and max.	-1; 1



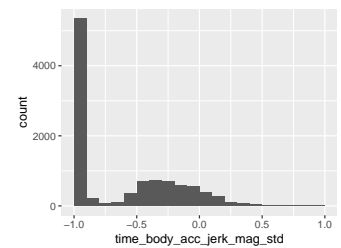
## time\_body\_acc\_jerk\_mag\_mean

Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	10292
Median	-0.95
1st and 3rd quartiles	-0.99; -0.3
Min. and max.	-1; 1



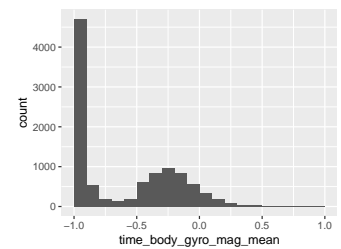
## time\_body\_acc\_jerk\_mag\_std

Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	10294
Median	-0.93
1st and 3rd quartiles	-0.99; -0.27
Min. and max.	-1; 1



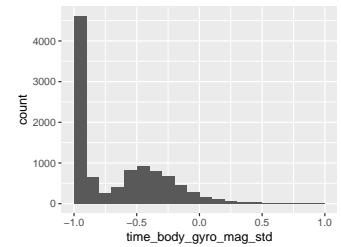
## time\_body\_gyro\_mag\_mean

Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	10298
Median	-0.82
1st and 3rd quartiles	-0.98; -0.25
Min. and max.	-1; 1



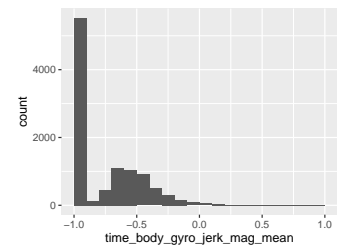
## time\_body\_gyro\_mag\_std

Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	10298
Median	-0.83
1st and 3rd quartiles	-0.98; -0.39
Min. and max.	-1; 1



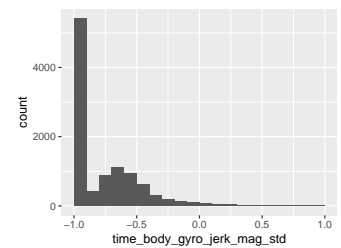
## time\_body\_gyro\_jerk\_mag\_mean

Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	10293
Median	-0.96
1st and 3rd quartiles	-0.99; -0.55
Min. and max.	-1; 1



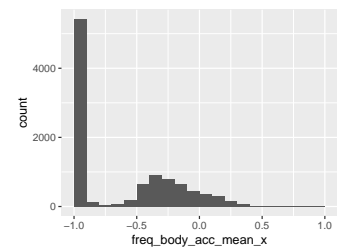
## time\_body\_gyro\_jerk\_mag\_std

Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	10297
Median	-0.94
1st and 3rd quartiles	-0.99; -0.61
Min. and max.	-1; 1



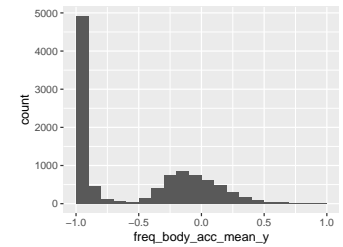
## freq\_body\_acc\_mean\_x

Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	10295
Median	-0.95
1st and 3rd quartiles	-0.99; -0.26
Min. and max.	-1; 1



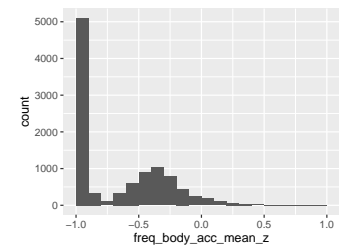
### freq\_body\_acc\_mean\_y

Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	10292
Median	-0.86
1st and 3rd quartiles	-0.98; -0.1
Min. and max.	-1; 1



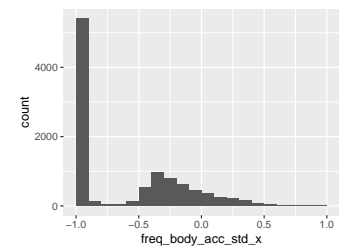
### freq\_body\_acc\_mean\_z

Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	10295
Median	-0.9
1st and 3rd quartiles	-0.98; -0.37
Min. and max.	-1; 1



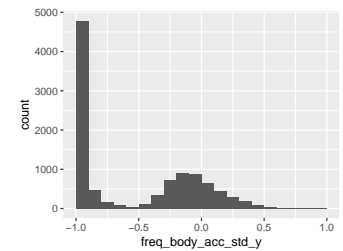
### freq\_body\_acc\_std\_x

Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	10294
Median	-0.94
1st and 3rd quartiles	-0.99; -0.25
Min. and max.	-1; 1



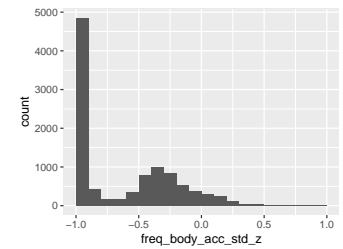
### freq\_body\_acc\_std\_y

Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	10297
Median	-0.83
1st and 3rd quartiles	-0.98; -0.09
Min. and max.	-1; 1



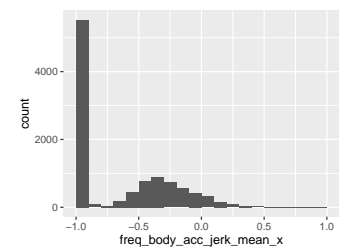
## freq\_body\_acc\_std\_z

Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	10296
Median	-0.84
1st and 3rd quartiles	-0.98; -0.3
Min. and max.	-1; 1



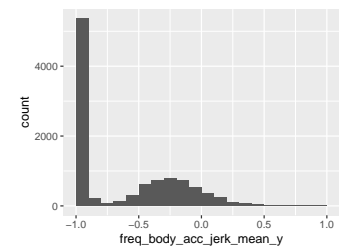
## freq\_body\_acc\_jerk\_mean\_x

Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	10293
Median	-0.95
1st and 3rd quartiles	-0.99; -0.33
Min. and max.	-1; 1



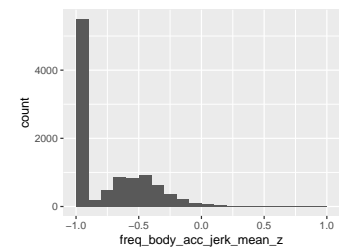
## freq\_body\_acc\_jerk\_mean\_y

Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	10296
Median	-0.93
1st and 3rd quartiles	-0.98; -0.26
Min. and max.	-1; 1



## freq\_body\_acc\_jerk\_mean\_z

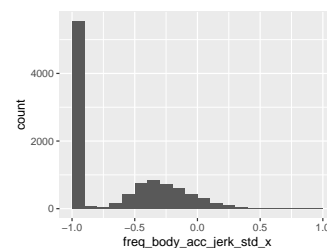
Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	10294
Median	-0.95
1st and 3rd quartiles	-0.99; -0.51
Min. and max.	-1; 1





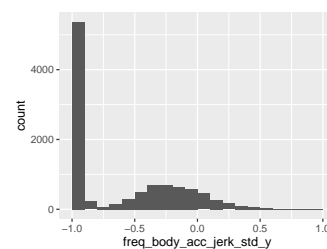
### freq\_body\_acc\_jerk\_std\_x

Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	10291
Median	-0.96
1st and 3rd quartiles	-0.99; -0.32
Min. and max.	-1; 1



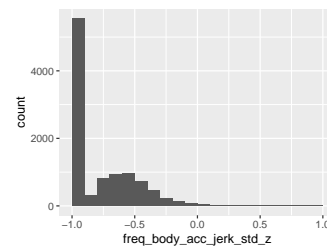
### freq\_body\_acc\_jerk\_std\_y

Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	10294
Median	-0.93
1st and 3rd quartiles	-0.99; -0.24
Min. and max.	-1; 1



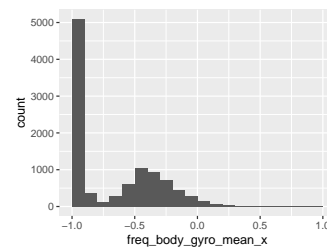
### freq\_body\_acc\_jerk\_std\_z

Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	10290
Median	-0.96
1st and 3rd quartiles	-0.99; -0.59
Min. and max.	-1; 1



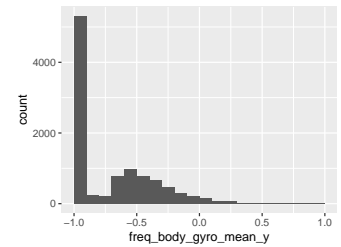
### freq\_body\_gyro\_mean\_x

Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	10297
Median	-0.89
1st and 3rd quartiles	-0.99; -0.38
Min. and max.	-1; 1



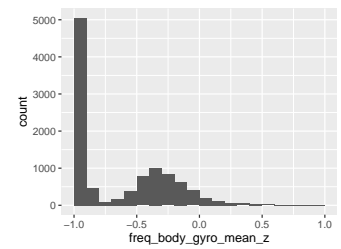
### freq\_body\_gyro\_mean\_y

Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	10296
Median	-0.92
1st and 3rd quartiles	-0.98; -0.47
Min. and max.	-1; 1



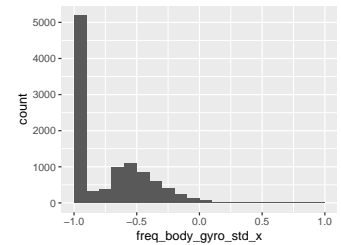
### freq\_body\_gyro\_mean\_z

Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	10297
Median	-0.89
1st and 3rd quartiles	-0.99; -0.32
Min. and max.	-1; 1



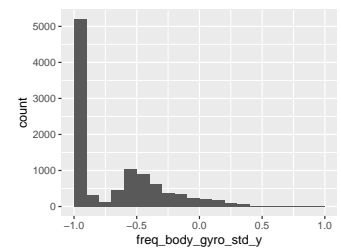
### freq\_body\_gyro\_std\_x

Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	10297
Median	-0.91
1st and 3rd quartiles	-0.99; -0.52
Min. and max.	-1; 1



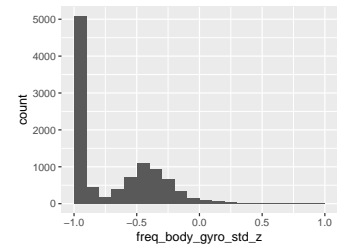
### freq\_body\_gyro\_std\_y

Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	10293
Median	-0.91
1st and 3rd quartiles	-0.98; -0.44
Min. and max.	-1; 1



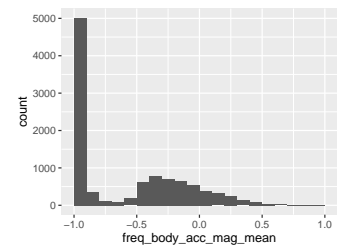
## freq\_body\_gyro\_std\_z

Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	10295
Median	-0.89
1st and 3rd quartiles	-0.99; -0.42
Min. and max.	-1; 1



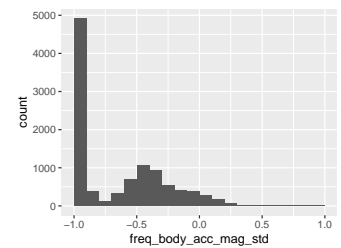
## freq\_body\_acc\_mag\_mean

Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	10296
Median	-0.88
1st and 3rd quartiles	-0.98; -0.22
Min. and max.	-1; 1



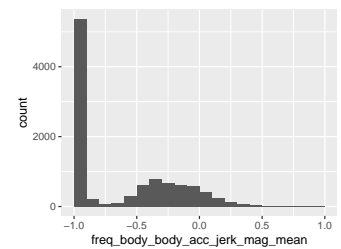
## freq\_body\_acc\_mag\_std

Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	10298
Median	-0.85
1st and 3rd quartiles	-0.98; -0.38
Min. and max.	-1; 1



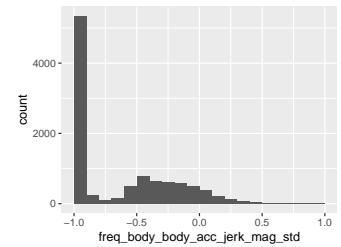
## freq\_body\_body\_acc\_jerk\_mag\_mean

Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	10290
Median	-0.93
1st and 3rd quartiles	-0.99; -0.26
Min. and max.	-1; 1



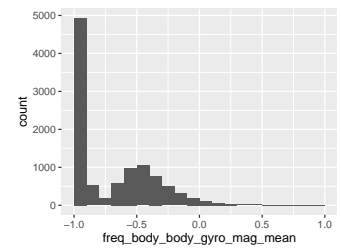
### freq\_body\_body\_acc\_jerk\_mag\_std

Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	10296
Median	-0.93
1st and 3rd quartiles	-0.99; -0.31
Min. and max.	-1; 1



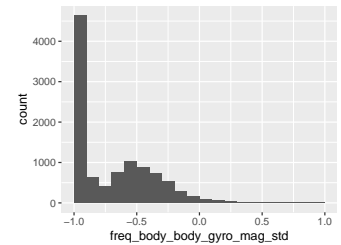
### freq\_body\_body\_gyro\_mag\_mean

Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	10297
Median	-0.88
1st and 3rd quartiles	-0.98; -0.45
Min. and max.	-1; 1



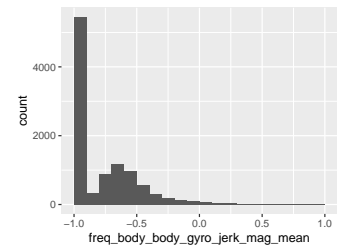
### freq\_body\_body\_gyro\_mag\_std

Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	10296
Median	-0.83
1st and 3rd quartiles	-0.98; -0.47
Min. and max.	-1; 1



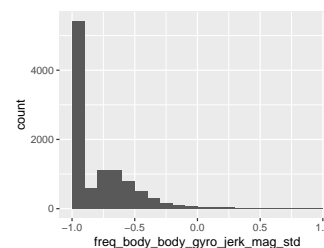
### freq\_body\_body\_gyro\_jerk\_mag\_mean

Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	10293
Median	-0.95
1st and 3rd quartiles	-0.99; -0.61
Min. and max.	-1; 1



## freq\_body\_body\_gyro\_jerk\_mag\_std

Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	10292
Median	-0.94
1st and 3rd quartiles	-0.99; -0.64
Min. and max.	-1; 1



### Report generation information:

- Created by: Doron Feingold (username: doronfeingold).
- Report creation time: Sat Jan 25 2025 14:27:38
- Report was run from directory: /Users/doronfeingold/Documents/Johns Hopkins/Data Science/Getting and Cleaning Data/FinalProject
- dataMaid v1.4.1 [Pkg: 2021-10-08 from CRAN (R 4.4.0)]
- R version 4.4.2 (2024-10-31).
- Platform: x86\_64-apple-darwin20(America/Toronto).
- Function call: 

```
dataMaid::makeDataReport(data = tables$tidy_data, mode = c("summarize", "visualize", "check"), smartNum = FALSE, file = "codebook_tables_tidy_data.Rmd", checks = list(character = "showAllFactorLevels", factor = "showAllFactorLevels", labelled = "showAllFactorLevels", haven_labelled = "showAllFactorLevels", numeric = NULL, integer = NULL, logical = NULL, Date = NULL), listChecks = FALSE, maxProbVals = Inf, codebook = TRUE, reportTitle = "Codebook for tables$tidy_data")
```