

Data Dictionary – Tidied HAR Data

This describes the variables included in the tidied version of the dataset from the “[Human Activity Recognition Using Smartphones Data Set](#)” found here:

Citation

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

Field: `subject` – Identifies one of the 30 subjects who participated in the study

Data type: Integer

Values: 1-30

Field: `activity` – Descriptive label for the Activity of Daily Living (ADL) that the subject was performing when this measurement was taken

Data type: Character

Values:

WALKING
WALKING_UPSTAIRS
WALKING_DOWNSTAIRS
SITTING
STANDING
LAYING

Field: `variable` – Names an index extracted from the measurements on a given subject performing a given activity. The measurements represent the means of tri-axial linear acceleration and angular velocity data from the accelerator and gyroscope of a smartphone worn at waist level by the subject. The full description of each index is to be found in the original dataset.

Data type: Character

Values:

tBodyAcc-mean()-X
tBodyAcc-mean()-Y
tBodyAcc-mean()-Z
tGravityAcc-mean()-X
tGravityAcc-mean()-Y
tGravityAcc-mean()-Z

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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()

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Field: `value` – The numerical value of the mean of a set of observations of a given index, for a given subject, performing a given activity.

Data type: Floating point numerical value.

Values: All values have been normalized between -1 and 1.