

DATA DICTIONARY
For
Project Output Data Set #1
"Train_test_mean.txt"
Coursera – Getting and Cleaning Data – June 2014

Original data set available at:

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

Paper describing the data is available at:

<https://www.elen.ucl.ac.be/Proceedings/esann/esannpdf/es2013-84.pdf>

Field data for each record is separated are comma separated and appear on the order listed below:

Subject_Id

Id of the subject this record pertains to.

1...30

Activity

Activity subject was engaged in.

WALKING

WALKING_UPSTAIRS

WALKING_DOWNSTAIRS

SITTING

STANDING

LAYING

The following variables are time and frequency domain signals obtained from the smartphone sensors for each subject in each activity. Fields starting with (t) are time related measurements and fields starting with (f) are frequency domain signals. Variables have suffixes ending with 'X', 'Y', and 'Z' which indicate triaxial measurements recorded in 3-dimensions. Fields with 'mean' contained in the field name represent the mean or average value of the recorded measurements. Fields with 'std' contained in the field name represent the standard deviation of the recorded measures. Field values with 'Acc' in the field name represent accelerometer measures. Field values with 'Gyro' in the field name represent gyroscope measures. See the text surrounding Table 2 in the referenced published paper for a full description of how the Body and Gravity features were calculated.

All fields 'mean' and 'std' within the field name were extracted from the original data set for completeness. Field data for each record are comma separated and appear in the order listed below:

"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"