CodeBook

The final dataset contains 68 columns and 180 rows. This codebook describes the 68 variables of the dataset.

The variables [3] – [68] are normalized and bounded within [-1,1].

More information of the expirement can be found in the files features_info.txt and README.txt of the original dataset https://d396qusza40orc.cloudfront.net/getdata%2Fprojectfiles%2FUCI%20HAR%20Dataset.zip.

[1] subject

The individual who performed the experiment. They are labeled from 1 to 30.

[2] activity

The performed activity

walking

walking_upstairs

walking_downstairs

sitting

standing

laying

[3] timeBodyAcc-mean()-X-mean

mean of time domain signal of body acceleration signals in x direction

[-1,1]

[4] timeBodyAcc-mean()-Y-mean

mean of time domain signal of body acceleration signals in y direction

[-1,1]

[5] timeBodyAcc-mean()-Z-mean

mean of time domain signal of body acceleration signals in z direction

[-1,1]

[6] timeBodyAcc-std()-X-mean

mean standard deviation of time domain signal of body acceleration signals in x direction

[-1,1]

[7] timeBodyAcc-std()-Y-mean

mean standard deviation of time domain signal of body acceleration signals in y direction

[-1,1]

[8] timeBodyAcc-std()-Z-mean

mean standard deviation of time domain signal of body acceleration signals in z direction

[-1,1]

[9] timeGravityAcc-mean()-X-mean

mean f time domain signal of gravity acceleration signals in x direction

[-1,1]

[10] timeGravityAcc-mean()-Y-mean

mean of time domain signal of gravity acceleration signals in x direction

[-1,1]

[11] timeGravityAcc-mean()-Z-mean

mean of time domain signal of gravity acceleration signals in x direction

[-1,1]

[12] timeGravityAcc-std()-X-mean

mean standard deviation of time domain signal of gravity acceleration signals in x direction

[-1,1]

[13] timeGravityAcc-std()-Y-mean

mean standard deviation of time domain signal of gravity acceleration signals in y direction

[-1,1]

[12] timeGravityAcc-std()-Z-mean

mean standard deviation of time domain signal of gravity acceleration signals in z direction

[-1,1]

[15] timeBodyAccJerk-mean()-X-mean

mean of time domain signal of body jerk acceleration signals in x direction

[-1,1]

[16] timeBodyAccJerk-mean()-Y-mean

mean of time domain signal of body jerk acceleration signals in y direction

[-1,1]

[17] timeBodyAccJerk-mean()-Z-mean

mean of time domain signal of body jerk acceleration signals in z direction

[-1,1]

[18] timeBodyAccJerk-std()-X-mean

mean of standard deviation of time domain signal of body jerk acceleration signals in x direction

[-1,1]

[19] timeBodyAccJerk-std()-Y-mean

mean of standard deviation of time domain signal of body jerk acceleration signals in y direction

[-1,1]

[20] timeBodyAccJerk-std()-Z-mean

mean of standard deviation of time domain signal of body jerk acceleration signals in z direction

[-1,1]

[21] timeBodyGyro-mean()-X-mean

mean of time domain signal of body gyroscope signals in x direction

[-1,1]

[22] timeBodyGyro-mean()-Y-mean

mean of time domain signal of body gyroscope signals in y direction

[-1,1]

[23] timeBodyGyro-mean()-Z-mean

mean of time domain signal of body gyroscope signals in z direction

[-1,1]

[24] timeBodyGyro-std()-X-mean

mean of standard deviation of time domain signal of body gyroscope signals in x direction

[-1,1]

[25] timeBodyGyro-std()-Y-mean

mean of standard deviation of time domain signal of body gyroscope signals in y direction

[-1,1]

[26] timeBodyGyro-std()-Z-mean

mean of standard deviation of time domain signal of body gyroscope signals in z direction

[-1,1]

[27] timeBodyGyroJerk-mean()-X-mean

mean of time domain signal of body gyroscope jerk signals in x direction

[-1,1]

[28] timeBodyGyroJerk-mean()-Y-mean

mean of time domain signal of body gyroscope jerk signals in y direction

[-1,1]

[29] timeBodyGyroJerk-mean()-Z-mean

mean of time domain signal of body gyroscope jerk signals in z direction

[-1,1]

[30] timeBodyGyroJerk-std()-X-mean

mean of standard deviation of time domain signal of body gyroscope jerk signals in x direction

[-1,1]

[31] timeBodyGyroJerk-std()-Y-mean

mean of standard deviation of time domain signal of body gyroscope jerk signals in y direction

[-1,1]

[32] timeBodyGyroJerk-std()-Z-mean

mean of standard deviation of time domain signal of body gyroscope jerk signals in z direction

[-1,1]

[33] timeBodyAccMag-mean()-mean

mean magnitude of the time domain signal of body acceleration signals, using Eucledean norm

[-1,1]

[34] timeBodyAccMag-std()-mean

mean standard deviation of the magnitude of the time domain signal of body acceleration signals, using Eucledean norm

[-1,1]

[35] timeGravityAccMag-mean()-mean

mean magnitude of of time domain signal of gravity acceleration signals using Euclidean norm

[-1,1]

[36]timeGravityAccMag-std()-mean

mean standard deviation of the magnitude of the time domain signal of gravity acceleration signals, using Eucledean norm

[-1,1]

[37] timeBodyAccJerkMag-mean()-mean

mean magnitude of time domain signal of body jerk acceleration signal using Euclidean norm

[-1,1]

[38] timeBodyAccJerkMag-std()-mean

mean standard deviation of magnitude of time domain signal of body jerk acceleration signal using Euclidean norm

[-1,1]

[39] timeBodyGyroMag-mean()-mean

mean magnitude of time domain signal of body gyroscope signals using Euclidean norm

[-1,1]

[40] timeBodyGyroMag-std()-mean

mean standard deviation of magnitude of time domain signal of body gyroscope signals using Euclidean norm

[-1,1]

[41] timeBodyGyroJerkMag-mean()-mean

mean magnitude of time domain signal of body gyroscope jerk signal using Euclidean norm

[-1,1]

[42] timeBodyGyroJerkMag-std()-mean

mean standard deviation of magnitude of time domain signal of body gyroscope jerk signal using Euclidean norm

[-1,1]

[43] fourierBodyAcc-mean()-X-mean

mean of Fast Fourier Transform of time domain signal of body acceleration signals in x direction

[-1,1]

[44] fourierBodyAcc-mean()-Y-mean

mean of Fast Fourier Transform of time domain signal of body acceleration signals in y

direction

[-1,1]

[45] fourierBodyAcc-mean()-Z-mean

mean of Fast Fourier Transform of time domain signal of body acceleration signals in z direction

[-1,1]

[46] fourierBodyAcc-std()-X-mean

mean of Fast Fourier Transform of standard deviation of time domain signal of body acceleration signals in x direction

[-1,1]

[47] fourierBodyAcc-std()-Y-mean

mean of Fast Fourier Transform of standard deviation of time domain signal of body acceleration signals in y direction

[-1,1]

[48] fourierBodyAcc-std()-Z-mean

mean of Fast Fourier Transform of standard deviation of time domain signal of body acceleration signals in z direction

[-1,1]

[49] fourierBodyAccJerk-mean()-X-mean

mean of Fast Fourier Transform of ime domain signal of gravity acceleration signals in x direction

[-1,1]

[50] fourierBodyAccJerk-mean()-Y-mean

mean of Fast Fourier Transform of time domain signal of gravity acceleration signals in y direction

[-1,1]

[51] fourierBodyAccJerk-mean()-Z-mean

mean of Fast Fourier Transform of time domain signal of gravity acceleration signals in z direction

[-1,1]

[52] fourierBodyAccJerk-std()-X-mean

mean of Fast Fourier Transform of standard deviation of time domain signal of gravity acceleration signals in x direction

[-1,1]

[53] fourierBodyAccJerk-std()-Y-mean

mean of Fast Fourier Transform of standard deviation of time domain signal of gravity acceleration signals in y direction

[-1,1]

[54] fourierBodyAccJerk-std()-Z-mean

mean of Fast Fourier Transform of standard deviation of time domain signal of gravity acceleration signals in z direction

[-1,1]

[55] fourierBodyGyro-mean()-X-mean

mean of Fast Fourier Transform of time domain signal of body gyroscope signals in x direction

[-1,1]

[56] fourierBodyGyro-mean()-Y-mean

mean of Fast Fourier Transform of time domain signal of body gyroscope signals in y direction

[-1,1]

[57] fourierBodyGyro-mean()-Z-mean

mean of Fast Fourier Transform of time domain signal of body gyroscope signals in z direction

[-1,1]

[58] fourierBodyGyro-std()-X-mean

mean of Fast Fourier Transform standard deviation of time domain signal of body gyroscope signals in x direction

[-1,1]

[59] fourierBodyGyro-std()-Y-mean

mean of Fast Fourier Transform standard deviation of time domain signal of body gyroscope signals in y direction

[-1,1]

[60] fourierBodyGyro-std()-Z-mean

mean of Fast Fourier Transform standard deviation of time domain signal of body gyroscope signals in z direction

[-1,1]

[61] fourierBodyAccMag-mean()-mean

mean of Fast Fourier Transform of mean magnitude of the time domain signal of body acceleration signals, using Eucledean norm

[-1,1]

[62] fourierBodyAccMag-std()-mean

mean of Fast Fourier Transform of standard deviation of magnitude of the time domain signal of body acceleration signals, using Eucledean norm

[-1,1]

[63] fourierBodyBodyAccJerkMag-mean()-mean

mean of fast Fourier Transform of mean magnitude of time domain signal of body jerk acceleration signal using Euclidean norm

[-1,1]

[64] fourierBodyBodyAccJerkMag-std()-mean

mean of fast Fourier Transform of standard deviation of magnitude of time domain signal of body jerk acceleration signal using Euclidean norm

[-1,1]

[65] fourierBodyBodyGyroMag-mean()-mean

mean of Fast Fourier Transform of mean magnitude of time domain signal of body gyroscope signals using Euclidean norm

[-1,1]

[66] fourierBodyBodyGyroMag-std()-mean

mean of Fast Fourier Transform of standard deviation of magnitude of time domain signal of body gyroscope signals using Euclidean norm

[-1,1]

[67] fourierBodyBodyGyroJerkMag-mean()-mean

mean of fast Fourier Transform of mean magnitude of time domain signal of body gyroscope jerk signal using Euclidean norm

[-1,1]

[68] fourierBodyBodyGyroJerkMag-std()-mean

mean of fast Fourier Transform of standard deviation of magnitude of time domain signal of body gyroscope jerk signal using Euclidean norm

[-1,1]