DATA DICTIONARY - HUMAN ACTIVITY RECOGNITION USING SMARTPHONE DATASET

subject

Subject Code

01..30 .Integer value representing a subject/person

activity

Activity performed by the Subject

Walking .subject walking

Walking_upstairs .subject walking upstairs Walking_downstairs .subject walking downstairs

Sitting .subject sitting down
Standing .subject standing up
Laying .subject laying down

timebodyaccelerometermeanxaxis

Accelerometer reading of body signals in \boldsymbol{x} axis in time domain, Mean value

1..-1 Real value of measurement for the person and activity

timebodyaccelerometermeanyaxis

Accelerometer reading of body signals in y axis in time domain, Mean value

1..-1 Real value of measurement for the person and activity

timebodyaccelerometermeanzaxis

Accelerometer reading of body signals in \boldsymbol{z} axis in time domain, Mean value

1..-1 Real value of measurement for the person and activity

timegravityaccelerometermeanxaxis

Accelerometer reading of gravity signals in \boldsymbol{x} axis in time domain, Mean value

1..-1 Real value of measurement for the person and activity

timegravityaccelerometermeanyaxis

Accelerometer reading of gravity signals in y axis in time domain, Mean value

1..-1 Real value of measurement for the person and activity

timegravityaccelerometermeanzaxis

Accelerometer reading of gravity signals in \boldsymbol{z} axis in time domain, Mean value

1..-1 Real value of measurement for the person and activity

timebodyaccelerometerjerkmeanxaxis

Accelerometer reading of body jerk signals in \boldsymbol{x} axis in time domain, Mean value

1..-1 Real value of measurement for the person and activity

timebodyaccelerometerjerkmeanyaxis

Accelerometer reading of body jerk signals in y axis in time domain, Mean value

1..-1 Real value of measurement for the person and activity

timebodyaccelerometerjerkmeanzaxis

Accelerometer reading of body jerk signals in z axis in time domain, Mean value

1..-1 Real value of measurement for the person and activity

timebodygyroscopemeanxaxis

Gyroscope reading of body signals in x axis in time domain, Mean value 1..-1 Real value of measurement for the person and activity

timebodygyroscopemeanyaxis

Gyroscope reading of body signals in y axis in time domain, Mean value 1..-1 Real value of measurement for the person and activity

timebodygyroscopemeanzaxis

Gyroscope reading of body signals in z axis in time domain, Mean value 1..-1 Real value of measurement for the person and activity

timebodygyroscopejerkmeanxaxis

Gyroscope reading of body jerk signals in ${\bf x}$ axis in time domain, Mean value

1..-1 Real value of measurement for the person and activity

timebodygyroscopejerkmeanyaxis

Gyroscope reading of body jerk signals in y axis in time domain, Mean value

1..-1 Real value of measurement for the person and activity

timebodygyroscopejerkmeanzaxis

Gyroscope reading of body jerk signals in z axis in time domain, Mean value

1..-1 Real value of measurement for the person and activity

timebodyaccelerometermagnitudemean

Accelerometer reading of body Fast Fourier Transform applied signals in time domain, Mean value

1..-1 Real value of measurement for the person and activity

timegravityaccelerometermagnitudemean

Accelerometer reading of gravity Fast Fourier Transform applied signals in time domain, Mean value

1..-1 Real value of measurement for the person and activity

timebodyaccelerometerjerkmagnitudemean

Accelerometer reading of body Fast Fourier Transform applied jerk signals in time domain, Mean value

1..-1 Real value of measurement for the person and activity

timebodygyroscopemagnitudemean

Gyroscope reading of body Fast Fourier Transform applied signals in time domain, Mean value

1..-1 Real value of measurement for the person and activity

timebodygyroscopejerkmagnitudemean

Gyroscope reading of body Fast Fourier Transform applied jerk signals in time domain, Mean value

1...-1 Real value of measurement for the person and activity

frequencybodyaccelerometermeanxaxis

Accelerometer reading of body signals in x axis in frequency domain, Mean value

1..-1 Real value of measurement for the person and activity

frequencybodyaccelerometermeanyaxis

Accelerometer reading of body signals in y axis in frequency domain, Mean value

1..-1 Real value of measurement for the person and activity

frequencybodyaccelerometermeanzaxis

Accelerometer reading of body signals in z axis in frequency domain, Mean value

frequencybodyaccelerometerjerkmeanxaxis

Accelerometer reading of body jerk signals in x axis in frequency domain, Mean value

1..-1 Real value of measurement for the person and activity

frequencybodyaccelerometerjerkmeanyaxis

Accelerometer reading of body jerk signals in y axis in frequency domain, Mean value

1..-1 Real value of measurement for the person and activity

frequencybodyaccelerometerjerkmeanzaxis

Accelerometer reading of body jerk signals in z axis in frequency domain, Mean value

1..-1 Real value of measurement for the person and activity

frequencybodygyroscopemeanxaxis

Gyroscope reading of body signals in \boldsymbol{x} axis in frequency domain, Mean value

1..-1 Real value of measurement for the person and activity

frequencybodygyroscopemeanyaxis

Gyroscope reading of body signals in y axis in frequency domain, Mean value

1..-1 Real value of measurement for the person and activity

frequencybodygyroscopemeanzaxis

Gyroscope reading of body signals in \boldsymbol{z} axis in frequency domain, Mean value

1..-1 Real value of measurement for the person and activity

frequencybodyaccelerometermagnitudemean

Accelerometer reading of body Fast Fourier Transform applied signals in frequency domain, Mean value

1..-1 Real value of measurement for the person and activity

frequencybodyaccelerometerjerkmagnitudemean

Accelerometer reading of body Fast Fourier Transform applied jerk signals in frequency domain, Mean value

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frequencybodygyroscopemagnitudemean

Gyroscope reading of body Fast Fourier Transform applied signals in time domain, Mean value

1..-1 Real value of measurement for the person and activity

frequencybodygyroscopejerkmagnitudemean

Gyroscope reading of body Fast Fourier Transform applied jerk signals in time domain, Mean value $\$

1..-1 Real value of measurement for the person and activity

timebodyaccelerometerstandarddeviationxaxis

Accelerometer reading of body signals in \boldsymbol{x} axis in time domain, Standard Deviation

1..-1 Real value of measurement for the person and activity

timebodyaccelerometerstandarddeviationyaxis

Accelerometer reading of body signals in y axis in time domain, Standard Deviation

timebodyaccelerometerstandarddeviationzaxis

Accelerometer reading of body signals in \boldsymbol{z} axis in time domain, Standard Deviation

1..-1 Real value of measurement for the person and activity

timegravityaccelerometerstandarddeviationxaxis

Accelerometer reading of gravity signals in \boldsymbol{x} axis in time domain, Standard Deviation

1..-1 Real value of measurement for the person and activity

timegravityaccelerometerstandarddeviationyaxis

Accelerometer reading of gravity signals in y axis in time domain, Standard Deviation

1..-1 Real value of measurement for the person and activity

 ${\tt timegravity} accelerometer standard deviation zax is$

Accelerometer reading of gravity signals in \boldsymbol{z} axis in time domain, Standard Deviation

1..-1 Real value of measurement for the person and activity

timebodyaccelerometerjerkstandarddeviationxaxis

Accelerometer reading of body jerk signals in \boldsymbol{x} axis in time domain, Standard Deviation

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timebodyaccelerometerjerkstandarddeviationyaxis

Accelerometer reading of body jerk signals in y axis in time domain, Standard Deviation

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timebodyaccelerometerjerkstandarddeviationzaxis

Accelerometer reading of body jerk signals in z axis in time domain, Standard Deviation

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timebodygyroscopestandarddeviationxaxis

Gyroscope reading of body signals in \boldsymbol{x} axis in time domain, Standard Deviation

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timebodygyroscopestandarddeviationyaxis

Gyroscope reading of body signals in y axis in time domain, Standard Deviation

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timebodygyroscopestandarddeviationzaxis

Gyroscope reading of body signals in z axis in time domain, Standard Deviation

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timebodygyroscopejerkstandarddeviationxaxis

Gyroscope reading of body jerk signals in \boldsymbol{x} axis in time domain, Standard Deviation

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timebodygyroscopejerkstandarddeviationyaxis

Gyroscope reading of body jerk signals in y axis in time domain, Standard Deviation

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Gyroscope reading of body jerk signals in z axis in time domain, Standard Deviation

1..-1 Real value of measurement for the person and activity

timebodyaccelerometermagnitudestandarddeviation

Accelerometer reading of body Fast Fourier Transform applied signals in time domain, Standard Deviation

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timegravityaccelerometermagnitudestandarddeviation

Accelerometer reading of gravity Fast Fourier Transform applied signals in time domain, Standard Deviation

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timebodyaccelerometerjerkmagnitudestandarddeviation

Accelerometer reading of body Fast Fourier Transform applied jerk signals in time domain, Standard Deviation

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Gyroscope reading of body Fast Fourier Transform applied signals in time domain, Standard Deviation

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frequencybodyaccelerometerstandarddeviationxaxis

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Gyroscope reading of body signals in z axis in frequency domain, Standard Deviation

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frequencybodygyroscopejerkmagnitudestandarddeviation

Gyroscope reading of body Fast Fourier Transform applied jerk signals in frequency domain, Standard Deviation

1..-1 Real value of measurement for the person and activity

LICENSE

[1] 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

NOTES

MEAN and STANDARD DEVIATION variables are normalized and Bounded within $[-1\ ,\ 1]$.

For more information about this dataset contact: activityrecognition@smartlab.ws