Codebook

activity

Factor variable with 6 levels. Each level corresponds to the activity performed by the person wearing a smartphone on which measurements are made.

1 laying

2 sitting

3 standing

4 walking

5 walking_downstairs

6 walking_upstairs

timebodyacceleration-mean-x

Mean of the time domain body acceleration signals in the x-axis captured at a constant rate of 50 Hz and then passed through a low pass filter at a corner frequency of 0.3 Hz.

timebodyacceleration-mean-y

Mean of the time domain body acceleration signals in the y-axis captured at a constant rate of 50 Hz and then passed through a low pass filter at a corner frequency of 0.3 Hz.

timebodyacceleration-mean-z

Mean of the time domain body acceleration signals in the z-axis captured at a constant rate of 50 Hz and then passed through a low pass filter at a corner frequency of 0.3 Hz.

timebodyacceleration-standarddeviation-x

Standard deviation of the time domain body acceleration signals in the x-axis captured at a constant rate of 50 Hz and then passed through a low pass filter at a corner frequency of 0.3 Hz.

timebodyacceleration-standarddeviation-y

Standard deviation of the time domain body acceleration signals in the y-axis captured at a constant rate of 50 Hz and then passed through a low pass filter at a corner frequency of 0.3 Hz.

timebodyacceleration-standarddeviation-z

Standard deviation of the time domain body acceleration signals in the z-axis captured at a constant rate of 50 Hz and then passed through a low pass filter at a corner frequency of 0.3 Hz.

timegravityacceleration-mean-x

Mean of the time domain gravity acceleration signals in the x-axis captured at a constant rate of 50 Hz and then passed through a low pass filter at a corner frequency of 0.3 Hz.

timegravityacceleration-mean-y

Mean of the time domain gravity acceleration signals in the y-axis captured at a constant rate of 50 Hz and then passed through a low pass filter at a corner frequency of 0.3 Hz.

timegravityacceleration-mean-z

Mean of the time domain gravity acceleration signals in the z-axis captured at a constant rate of 50 Hz and then passed through a low pass filter at a corner frequency of 0.3 Hz.

timegravityacceleration-standardeviation-x

Standard deviation of the time domain gravity acceleration signals in the x-axis captured at a constant rate of 50 Hz and then passed through a low pass filter at a corner frequency of 0.3 Hz.

timegravityacceleration-standardeviation-y

Standard deviation of the time domain gravity acceleration signals in the y-axis captured at a constant rate of 50 Hz and then passed through a low pass filter at a corner frequency of 0.3 Hz.

timegravityacceleration-standardeviation-z

Standard deviation of the time domain gravity acceleration signals in the z-axis captured at a constant rate of 50 Hz and then passed through a low pass filter at a corner frequency of 0.3 Hz.

timebodyaccelerationjerk-mean-x

Mean of the time domain body acceleration jerk signals in the x-axis captured at a constant rate of 50 Hz and then passed through a low pass filter at a corner frequency of 0.3 Hz.

timebodyaccelerationjerk-mean-y

Mean of the time domain body acceleration jerk signals in the y-axis captured at a constant rate of 50 Hz and then passed through a low pass filter at a corner frequency of 0.3 Hz.

timebodyaccelerationjerk-mean-z

Mean of the time domain body acceleration jerk signals in the z-axis captured at a constant rate of 50 Hz and then passed through a low pass filter at a corner frequency of 0.3 Hz.

timebodyaccelerationjerk-standardeviation-x

Standard deviation of the time domain body acceleration jerk signals in the x-axis captured at a constant rate of 50 Hz and then passed through a low pass filter at a corner frequency of 0.3 Hz.

timebodyaccelerationjerk-standardeviation-y

Standard deviation of the time domain body acceleration jerk signals in the y-axis captured at a constant rate of 50 Hz and then passed through a low pass filter at a corner frequency of 0.3 Hz.

timebodyaccelerationjerk-standardeviation-z

Standard deviation of the time domain body acceleration jerk signals in the z-axis captured at a constant rate of 50 Hz and then passed through a low pass filter at a corner frequency of 0.3 Hz.

timebodyorientation-mean-x

Mean of the time domain body orientation signals in the x-axis captured at a constant rate of 50 Hz and then passed through a low pass filter at a corner frequency of 0.3 Hz.

timebodyorientation-mean-y

Mean of the time domain body orientation signals in the y-axis captured at a constant rate of 50 Hz and then passed through a low pass filter at a corner frequency of 0.3 Hz.

timebodyorientation-mean-z

Mean of the time domain body orientation signals in the z-axis captured at a constant rate of 50 Hz and then passed through a low pass filter at a corner frequency of 0.3 Hz.

timebodyorientation-standardeviation-x

Standard deviation of the time domain body orientation signals in the x-axis captured at a constant rate of 50 Hz and then passed through a low pass filter at a corner frequency of 0.3 Hz.

timebodyorientation-standardeviation-y

Standard deviation of the time domain body orientation signals in the y-axis captured at a constant rate of 50 Hz and then passed through a low pass filter at a corner frequency of 0.3 Hz.

timebodyorientation-standardeviation-z

Standard deviation of the time domain body orientation signals in the z-axis captured at a constant rate of 50 Hz and then passed through a low pass filter at a corner frequency of 0.3 Hz.

timebodyorientationjerk-mean-x

Mean of the time domain body orientation jerk signals in the x-axis captured at a constant rate of 50 Hz and then passed through a low pass filter at a corner frequency of 0.3 Hz.

timebodyorientationjerk-mean-y

Mean of the time domain body orientation jerk signals in the y-axis captured at a constant rate of 50 Hz and then passed through a low pass filter at a corner frequency of 0.3 Hz.

timebodyorientationjerk-mean-z

Mean of the time domain body orientation jerk signals in the z-axis captured at a constant rate of 50 Hz and then passed through a low pass filter at a corner frequency of 0.3 Hz.

timebodyorientationjerk-standardeviation-x

Mean of the time domain body orientation jerk signals in the x-axis captured at a constant rate of 50 Hz and then passed through a low pass filter at a corner frequency of 0.3 Hz.

timebodyorientationjerk-standardeviation-y

Mean of the time domain body orientation jerk signals in the y-axis captured at a constant rate of 50 Hz and then passed through a low pass filter at a corner frequency of 0.3 Hz.

timebodyorientationjerk-standardeviation-z

Mean of the time domain body orientation jerk signals in the z-axis captured at a constant rate of 50 Hz and then passed through a low pass filter at a corner frequency of 0.3 Hz.

timebodyaccelerationmagnitude-mean

Mean of the magnitude of the time domain body acceleration signals calculated in the Euclidean norm.

timebodyaccelerationmagnitude-standardeviation

Standard deviation of the magnitude of the time domain body acceleration signals calculated in the Euclidean norm.

timegravityaccelerationmagnitude-mean

Mean of the magnitude of the time domain gravity acceleration signals calculated in the Euclidean norm.

timegravityaccelerationmagnitude-standardeviation

Standard deviation of the magnitude of the time domain gravity acceleration signals calculated in the Euclidean norm.

timebodyaccelerationjerkmagnitude-mean

Mean of the magnitude of the time domain body acceleration jerk signals calculated in the Euclidean norm.

timebodyaccelerationjerkmagnitude-standardeviation

Standard deviation of the magnitude of the time domain body acceleration jerk signals calculated in the Euclidean norm.

timebodyorientationmagnitude-mean

Mean of the magnitude of the time domain body orientation signals calculated in the Euclidean norm.

timebodyorientationmagnitude-standardeviation

Standard deviation of the magnitude of the time domain body orientation signals calculated in the Euclidean norm.

timebodyorientationjerkmagnitude-mean

Mean of the magnitude of the time domain body orientation jerk signals calculated in the Euclidean norm.

timebodyorientationjerkmagnitude-standardeviation

Standard deviation of the magnitude of the time domain body orientation jerk signals calculated in the Euclidean norm.

frequencybodyacceleration-mean-x

Mean of the frequency domain body acceleration signals in the x-axis captured at a constant rate of 50 Hz and then passed through a low pass filter at a corner frequency of 0.3 Hz.

frequencybodyacceleration-mean-y

Mean of the frequency domain body acceleration signals in the y-axis captured at a constant rate of 50 Hz and then passed through a low pass filter at a corner frequency of 0.3 Hz.

frequencybodyacceleration-mean-z

Mean of the frequency domain body acceleration signals in the z-axis captured at a constant rate of 50 Hz and then passed through a low pass filter at a corner frequency of 0.3 Hz.

frequencybodyacceleration-standardeviation-x

Standard deviation of the frequency domain body acceleration signals in the x-axis captured at a constant rate of 50 Hz and then passed through a low pass filter at a corner frequency of 0.3 Hz.

frequencybodyacceleration-standardeviation-y

Standard deviation of the frequency domain body acceleration signals in the y-axis captured at a constant rate of 50 Hz and then passed through a low pass filter at a corner frequency of 0.3 Hz.

frequencybodyacceleration-standardeviation-z

Standard deviation of the frequency domain body acceleration signals in the z-axis captured at a constant rate of 50 Hz and then passed through a low pass filter at a corner frequency of 0.3 Hz.

frequencybodyaccelerationjerk-mean-x

Mean of the frequency domain body acceleration jerk signals in the x-axis captured at a constant rate of 50 Hz and then passed through a low pass filter at a corner frequency of 0.3 Hz.

frequencybodyaccelerationjerk-mean-y

Mean of the frequency domain body acceleration jerk signals in the y-axis captured at a constant rate of 50 Hz and then passed through a low pass filter at a corner frequency of 0.3 Hz.

frequencybodyaccelerationjerk-mean-z

Mean of the frequency domain body acceleration jerk signals in the z-axis captured at a constant rate of 50 Hz and then passed through a low pass filter at a corner frequency of 0.3 Hz.

frequencybodyaccelerationjerk-standardeviation-x

Standard deviation of the frequency domain body acceleration jerk signals in the x-axis captured at a constant rate of 50 Hz and then passed through a low pass filter at a corner frequency of 0.3 Hz.

frequencybodyaccelerationjerk-standardeviation-y

Standard deviation of the frequency domain body acceleration jerk signals in the y-axis captured at a constant rate of 50 Hz and then passed through a low pass filter at a corner frequency of 0.3 Hz.

frequencybodyaccelerationjerk-standardeviation-z

Standard deviation of the frequency domain body acceleration jerk signals in the z-axis captured at a constant rate of 50 Hz and then passed through a low pass filter at a corner frequency of 0.3 Hz.

frequencybodyorientation-mean-x

Mean of the frequency domain body orientation signals in the x-axis captured at a constant rate of 50 Hz and then passed through a low pass filter at a corner frequency of 0.3 Hz.

frequencybodyorientation-mean-y

Mean of the frequency domain body orientation signals in the y-axis captured at a constant rate of 50 Hz and then passed through a low pass filter at a corner frequency of 0.3 Hz.

frequencybodyorientation-mean-z

Mean of the frequency domain body orientation signals in the z-axis captured at a constant rate of 50 Hz and then passed through a low pass filter at a corner frequency of 0.3 Hz.

frequencybodyorientation-standardeviation-x

Standard deviation of the frequency domain body orientation signals in the x-axis captured at a constant rate of 50 Hz and then passed through a low pass filter at a corner frequency of 0.3 Hz.

frequencybodyorientation-standardeviation-y

Standard deviation of the frequency domain body orientation signals in the y-axis captured at a constant rate of 50 Hz and then passed through a low pass filter at a corner frequency of 0.3 Hz.

frequencybodyorientation-standardeviation-z

Standard deviation of the frequency domain body orientation signals in the z-axis captured at a constant rate of 50 Hz and then passed through a low pass filter at a corner frequency of 0.3 Hz.

frequencybodyaccelerationmagnitude-mean

Mean of the magnitude of the frequency domain body acceleration signals calculated in the Euclidean norm.

frequencybodyaccelerationmagnitude-standardeviation

Standard deviation of the magnitude of the frequency domain body acceleration signals calculated in the Euclidean norm.

frequencybodyaccelerationjerkmagnitude-mean

Mean of the magnitude of the frequency domain body acceleration jerk signals calculated in the Euclidean norm.

frequencybodyaccelerationjerkmagnitude-standardeviation

Standard deviation of the magnitude of the frequency domain body acceleration jerk signals calculated in the Euclidean norm.

frequencybodyorientationmagnitude-mean

Mean of the magnitude of the frequency domain body orientation signals calculated in the Euclidean norm.

frequencybodyorientationmagnitude-standardeviation

Standard deviation of the magnitude of the frequency domain body orientation signals calculated in the Euclidean norm.

frequencybodyorientationjerkmagnitude-mean

Mean of the magnitude of the frequency domain body orientation jerk signals calculated in the Euclidean norm.

frequencybodyorientationjerkmagnitude-standardeviation

Standard deviation of the magnitude of the frequency domain body orientation jerk signals calculated in the Euclidean norm.

Study Design

Out of the 561 variables in the data set, 67 were selected. These 67 variables measure only either the mean or the standard deviation of the features recorded in the data. All other variables, including variables which measure the mean frequency of the features, were excluded.