subject

* Participant number, between 1-30

activity

* Type of activity performed during measurement (WALKING, WALKING\_UPSTAIRS, WALKING\_DOWNSTAIRS, SITTING, STANDING, LAYING)

timebodyaccelerometrymeanx

timebodyaccelerometrymeany

timebodyaccelerometrymeanz

* The mean of the acceleration signal from the smartphone accelerometer corresponding to body movement in the X,Y, or Z axis in standard gravity units 'g'.

timegravityaccelerometrymeanx

timegravityaccelerometrymeany

timegravityaccelerometrymeanz

* The mean of the acceleration signal from the smartphone accelerometer corresponding to gravity in the X,Y, or Z axis in standard gravity units 'g'.

timebodyaccelerometryjerkmeanx

timebodyaccelerometryjerkmeany

timebodyaccelerometryjerkmeanz

* The first derivative of gyroscopy readings in the X, Y, or Z axis. Units are radians/second2.

timebodygyroscopymeanx

timebodygyroscopymeany

timebodygyroscopymeanz

* The mean of the angular velocity vector measured by the gyroscope corresponding to the body in the X,Y, or Z axis. The units are radians/second.

timebodygyroscopyjerkmeanx

timebodygyroscopyjerkmeany

timebodygyroscopyjerkmeanz

* The first derivative of gyroscopy readings in the X, Y, or Z axis. Units are radians/second2.

timebodyaccelerometrymagnitudemean

timegravityaccelerometrymagnitudemean

timebodyaccelerometryjerkmagnitudemean

timebodygyroscopymagnitudemean

timebodygyroscopyjerkmagnitudemean

* The magnitude of these three-dimensional signals corresponding to gravity from accelerometer were calculated using the Euclidean norm. Units are preserved from original measurements.

fouriertransformedbodyaccelerometrymeanx

fouriertransformedbodyaccelerometrymeany

fouriertransformedbodyaccelerometrymeanz

fouriertransformedbodyaccelerometryjerkmeanx

fouriertransformedbodyaccelerometryjerkmeany

fouriertransformedbodyaccelerometryjerkmeanz

fouriertransformedbodygyroscopymeanx

fouriertransformedbodygyroscopymeany

fouriertransformedbodygyroscopymeanz

fouriertransformedbodyaccelerometrymagnitudemean

fouriertransformedbodyaccelerometryjerkmagnitudemean

fouriertransformedbodygyroscopymagnitudemean

fouriertransformedbodygyroscopyjerkmagnitudemean

* a Fast Fourier Transform (FFT) was applied to all measurements above. Units are preserved from “time” measurements.

timebodyaccelerometrystdx

timebodyaccelerometrystdy

timebodyaccelerometrystdz

timegravityaccelerometrystdx

timegravityaccelerometrystdy

timegravityaccelerometrystdz

timebodyaccelerometryjerkstdx

timebodyaccelerometryjerkstdy

timebodyaccelerometryjerkstdz

timebodygyroscopystdx

timebodygyroscopystdy

timebodygyroscopystdz

timebodygyroscopyjerkstdx

timebodygyroscopyjerkstdy

timebodygyroscopyjerkstdz

timebodyaccelerometrymagnitudestd

timegravityaccelerometrymagnitudestd

timebodyaccelerometryjerkmagnitudestd

timebodygyroscopymagnitudestd

timebodygyroscopyjerkmagnitudestd

fouriertransformedbodyaccelerometrystdx

fouriertransformedbodyaccelerometrystdy

fouriertransformedbodyaccelerometrystdz

fouriertransformedbodyaccelerometryjerkstdx

fouriertransformedbodyaccelerometryjerkstdy

fouriertransformedbodyaccelerometryjerkstdz

fouriertransformedbodygyroscopystdx

fouriertransformedbodygyroscopystdy

fouriertransformedbodygyroscopystdz

fouriertransformedbodyaccelerometrymagnitudestd

fouriertransformedbodyaccelerometryjerkmagnitudestd

fouriertransformedbodygyroscopymagnitudestd

fouriertransformedbodygyroscopyjerkmagnitudestd

* the standard deviations of all measurements described above.