Phone Accelerometer and Gyroscope Data

Processed data set derived from UCI HAR dataset

Original data available at
http://archive.ics.uci.edu/ml/datasets/Human+Activity+Recognition+Using+Smartphones
last accessed May 24, 2015

Data classified by subject and activity

Acceleration and Gyroscope Position and Magnitude measured in 3 dimensions, including Fourier Transforms

Measure	Description
BodyAccel	Acceleration Vector of Subject
GravityAccel	Acceleration Vector due to Gravity
BodyAccelJerk	Jerk Vector of Subject
BodyGyroscope	Rotational Acceleration Vector of Subject
BodyGyroscopeJerk	Jerk of Rotational Acceleration Vector of Subject

Each Measure is provided as position and magnitude; Mean and Standard Deviations in 3 dimensions are given for position; Mean and Standard Deviation also given for Magnitude

Fourier Transforms are provided for position and magnitude of Body Acceleration, Body Acceleration Jerk, and Body Rotational Acceleration ("Gyroscope") vectors.

Classification Features

Feature Name	Data Type	Description
SubjectNumber	Numeric	Subjects, numbered 1 - 30
Activity	Text	6 Activity types: Sitting, Standing, Laying, Walking, Walking Downstairs, Walking Upstairs

Measurement Features

Feature Name	Feature Type	Measure	Summary Type	Dimension
BodyAccelMean_Xaxis	Position	BodyAccel	Mean	_Xaxis
BodyAccelMean_Yaxis	Position	BodyAccel	Mean	_Yaxis
BodyAccelMean_Zaxis	Position	BodyAccel	Mean	_Zaxis
BodyAccelStDev_Xaxis	Position	BodyAccel	StDev	_Xaxis
BodyAccelStDev_Yaxis	Position	BodyAccel	StDev	_Yaxis
BodyAccelStDev_Zaxis	Position	BodyAccel	StDev	_Zaxis
GravityAccelMean_Xaxis	Position	GravityAccel	Mean	_Xaxis
GravityAccelMean_Yaxis	Position	GravityAccel	Mean	_Yaxis
GravityAccelMean_Zaxis	Position	GravityAccel	Mean	_Zaxis
GravityAccelStDev_Xaxis	Position	GravityAccel	StDev	_Xaxis
GravityAccelStDev_Yaxis	Position	GravityAccel	StDev	_Yaxis
GravityAccelStDev_Zaxis	Position	GravityAccel	StDev	_Zaxis
BodyAccelJerkMean_Xaxis	Position	BodyAccelJerk	Mean	_Xaxis
BodyAccelJerkMean_Yaxis	Position	BodyAccelJerk	Mean	_Yaxis
BodyAccelJerkMean_Zaxis	Position	BodyAccelJerk	Mean	_Zaxis
BodyAccelJerkStDev_Xaxis	Position	BodyAccelJerk	StDev	_Xaxis
BodyAccelJerkStDev_Yaxis	Position	BodyAccelJerk	StDev	_Yaxis
BodyAccelJerkStDev_Zaxis	Position	BodyAccelJerk	StDev	_Zaxis
BodyGyroscopeMean_Xaxis	Position	BodyGyroscope	Mean	_Xaxis
BodyGyroscopeMean_Yaxis	Position	BodyGyroscope	Mean	_Yaxis
BodyGyroscopeMean_Zaxis	Position	BodyGyroscope	Mean	_Zaxis
BodyGyroscopeStDev_Xaxis	Position	BodyGyroscope	StDev	_Xaxis
BodyGyroscopeStDev_Yaxis	Position	BodyGyroscope	StDev	_Yaxis
BodyGyroscopeStDev_Zaxis	Position	BodyGyroscope	StDev	_Zaxis
BodyGyroscopeJerkMean_Xaxis	Position	BodyGyroscopeJerk	Mean	_Xaxis
BodyGyroscopeJerkMean_Yaxis	Position	BodyGyroscopeJerk	Mean	_Yaxis
BodyGyroscopeJerkMean_Zaxis	Position	BodyGyroscopeJerk	Mean	_Zaxis
BodyGyroscopeJerkStDev_Xaxis	Position	BodyGyroscopeJerk	StDev	_Xaxis
BodyGyroscopeJerkStDev_Yaxis	Position	BodyGyroscopeJerk	StDev	_Yaxis
BodyGyroscopeJerkStDev_Zaxis	Position	BodyGyroscopeJerk	StDev	_Zaxis
BodyAccelMagnitudeMean	Magnitude	BodyAccelMagnitude	Mean	

BodyAccelMagnitudeStDev	Magnitude	BodyAccelMagnitude	StDev	
GravityAccelMagnitudeMean	Magnitude	GravityAccelMagnitude	Mean	
GravityAccelMagnitudeStDev	Magnitude	GravityAccelMagnitude	StDev	
BodyAccelJerkMagnitudeMean	Magnitude	BodyAccelJerkMagnitude	Mean	
BodyAccelJerkMagnitudeStDev	Magnitude	BodyAccelJerkMagnitude	StDev	
BodyGyroscopeMagnitudeMean	Magnitude	BodyGyroscopeMagnitude	Mean	
BodyGyroscopeMagnitudeStDev	Magnitude	BodyGyroscopeMagnitude	StDev	
BodyGyroscopeJerkMagnitudeMean	Magnitude	BodyGyroscopeJerkMagnitude	Mean	
BodyGyroscopeJerkMagnitudeStDev	Magnitude	BodyGyroscopeJerkMagnitude	StDev	
FFT_BodyAccelMean_Xaxis	Position	FFT_BodyAccel	Mean	_Xaxis
FFT_BodyAccelMean_Yaxis	Position	FFT_BodyAccel	Mean	_Yaxis
FFT_BodyAccelMean_Zaxis	Position	FFT_BodyAccel	Mean	_Zaxis
FFT_BodyAccelStDev_Xaxis	Position	FFT_BodyAccel	StDev	_Xaxis
FFT_BodyAccelStDev_Yaxis	Position	FFT_BodyAccel	StDev	_Yaxis
FFT_BodyAccelStDev_Zaxis	Position	FFT_BodyAccel	StDev	_Zaxis
FFT_BodyAccelJerkMean_Xaxis	Position	FFT_BodyAccelJerk	Mean	_Xaxis
FFT_BodyAccelJerkMean_Yaxis	Position	FFT_BodyAccelJerk	Mean	_Yaxis
FFT_BodyAccelJerkMean_Zaxis	Position	FFT_BodyAccelJerk	Mean	_Zaxis
FFT_BodyAccelJerkStDev_Xaxis	Position	FFT_BodyAccelJerk	StDev	_Xaxis
FFT_BodyAccelJerkStDev_Yaxis	Position	FFT_BodyAccelJerk	StDev	_Yaxis
FFT_BodyAccelJerkStDev_Zaxis	Position	FFT_BodyAccelJerk	StDev	_Zaxis
FFT_BodyGyroscopeMean_Xaxis	Position	FFT_BodyGyroscope	Mean	_Xaxis
FFT_BodyGyroscopeMean_Yaxis	Position	FFT_BodyGyroscope	Mean	_Yaxis
FFT_BodyGyroscopeMean_Zaxis	Position	FFT_BodyGyroscope	Mean	_Zaxis
FFT_BodyGyroscopeStDev_Xaxis	Position	FFT_BodyGyroscope	StDev	_Xaxis
FFT_BodyGyroscopeStDev_Yaxis	Position	FFT_BodyGyroscope	StDev	_Yaxis
FFT_BodyGyroscopeStDev_Zaxis	Position	FFT_BodyGyroscope	StDev	_Zaxis
FFT_BodyAccelMagnitudeMean	Magnitude	FFT_BodyAccelMagnitude	Mean	
FFT_BodyAccelMagnitudeStDev	Magnitude	FFT_BodyAccelMagnitude	StDev	
FFT_BodyAccelJerkMagnitudeMean	Magnitude	FFT_BodyAccelJerkMagnitude	Mean	
FFT_BodyAccelJerkMagnitudeStDev	Magnitude	FFT_BodyAccelJerkMagnitude	StDev	
FFT_BodyGyroscopeMagnitudeMean	Magnitude	FFT_BodyGyroscopeMagnitude	Mean	
FFT_BodyGyroscopeMagnitudeStDev	Magnitude	FFT_BodyGyroscopeMagnitude	StDev	
FFT_BodyGyroscopeJerkMagnitudeMean	Magnitude	FFT_BodyGyroscopeJerkMagnitude	Mean	
FFT_BodyGyroscopeJerkMagnitudeStDev	Magnitude	FFT_BodyGyroscopeJerkMagnitude	StDev	