Aggregate Mean Data, by test subject, and activity, for wearable Accelerometer/Gyroscope. MeanAggregateData.txt

First two columns contain the following variables:

Subject number (1-30)

Activity which is one of the following 6 activities:

WALKING, WALKING UPSTAIRS, WALKING DOWNSTAIRS, SITTING, STANDING, LAYING

All of the remaining included data are the average of each variable, for each of the six activities and each of the 30 test subjects.

All data is time domain signals, captured at 50 Hz, and filtered with a median filter and a 3rd order low pass Butterworth filter, with a corner frequency of 20 Hz to remove noise.

The Acceleration signal was separated into body and gravity acceleration signals, using another low pass Butterworth filter

Headings

"subject"

Test subject number (1-30)

"activity"

Activity of the test subject, one of six possibilities:

WALKING, WALKING_UPSTAIRS, WALKING_DOWNSTAIRS, SITTING, STANDING, LAYING "AggMeanOfTBodyAccMeanX"

Mean, by Subject and Activity, of the Mean body acceleration on X axis "AggMeanOfTBodyAccMeanY"

Mean, by Subject and Activity, of the Mean body acceleration on Y axis "AggMeanOfTBodyAccMeanZ"

Mean, by Subject and Activity, of the Mean body acceleration on Z axis "AggMeanOfTGravityAccMeanX"

Mean, by Subject and Activity, of the Mean gravity acceleration on X axis "AggMeanOfTGravityAccMeanY"

Mean, by Subject and Activity, of the Mean gravity acceleration on Y axis "AggMeanOfTGravityAccMeanZ"

Mean, by Subject and Activity, of the Mean gravity acceleration on Z axis "AggMeanOfTBodyAccJerkMeanX"

Mean, by Subject and Activity, of the derived Jerk signal (from the body linear acceleration) on X axis

"AggMeanOfTBodyAccJerkMeanY"

Mean, by Subject and Activity, of the derived Jerk signal (from the body linear acceleration) on Y axis

"AggMeanOfTBodyAccJerkMeanZ"

Mean, by Subject and Activity, of the derived Jerk signal (from the body linear acceleration) on Z axis

"AggMeanOfTBodyGyroMeanX"

Mean, by Subject and Activity, of the Mean body angular velocity on X axis

"AggMeanOfTBodyGyroMeanY"

Mean, by Subject and Activity, of the Mean body angular velocity on Y axis

"AggMeanOfTBodyGyroMeanZ"

Mean, by Subject and Activity, of the Mean body angular velocity on Z axis

"AggMeanOfTBodyGyroJerkMeanX"

Mean, by Subject and Activity, of the derived Jerk signal (from the body angular velocity) on X axis

"AggMeanOfTBodyGyroJerkMeanY"

Mean, by Subject and Activity, of the derived Jerk signal (from the body angular velocity) on Y axis

"AggMeanOfTBodyGyroJerkMeanZ"

Mean, by Subject and Activity, of the derived Jerk signal (from the body angular velocity) on Z axis

"AggMeanOfTBodyAccMagMean"

Mean, by Subject and Activity, of the magnitude (Euclidean norm) of the body acceleration

"AggMeanOfTGravityAccMagMean"

Mean, by Subject and Activity, of the magnitude (Euclidean norm) of the gravity acceleration

"AggMeanOfTBodyAccJerkMagMean"

Mean, by Subject and Activity, of the magnitude (Euclidean norm) of the derived Jerk signal (from the body linear acceleration).

"AggMeanOfTBodyGyroMagMean"

Mean, by Subject and Activity, of the magnitude (Euclidean norm) of the Mean body angular velocity.

"AggMeanOfTBodyGyroJerkMagMean"

Mean, by Subject and Activity, of the magnitude (Euclidean norm) of the derived Jerk signal (from the body angular velocity).

"AggMeanOfTBodyAccStdX"

Standard Deviation, by Subject and Activity, of the Mean body acceleration on X axis

"AggMeanOfTBodyAccStdY"

Standard Deviation, by Subject and Activity, of the Mean body acceleration on Y axis

"AggMeanOfTBodyAccStdZ"

Standard Deviation, by Subject and Activity, of the Mean body acceleration on Z axis

"AggMeanOfTGravityAccStdX"

Standard Deviation, by Subject and Activity, of the Mean gravity acceleration on X axis

"AggMeanOfTGravityAccStdY"

Standard Deviation, by Subject and Activity, of the Mean gravity acceleration on Y axis

"AggMeanOfTGravityAccStdZ"

Standard Deviation, by Subject and Activity, of the Mean gravity acceleration on Z axis

"AggMeanOfTBodyAccJerkStdX"

Standard Deviation, by Subject and Activity, of the derived Jerk signal (from the body linear acceleration) on X axis

"AggMeanOfTBodyAccJerkStdY"

Standard Deviation, by Subject and Activity, of the derived Jerk signal (from the body linear acceleration) on Y axis

"AggMeanOfTBodyAccJerkStdZ"

Standard Deviation, by Subject and Activity, of the derived Jerk signal (from the body linear acceleration) on Z axis

"AggMeanOfTBodyGyroStdX"

Standard Deviation, by Subject and Activity, of the Mean body angular velocity on X axis

"AggMeanOfTBodyGyroStdY"

Standard Deviation, by Subject and Activity, of the Mean body angular velocity on Y axis $\,$

"AggMeanOfTBodyGyroStdZ"

Standard Deviation, by Subject and Activity, of the Mean body angular velocity on ${\tt Z}$ axis

"AggMeanOfTBodyGyroJerkStdX"

Standard Deviation, by Subject and Activity, of the derived Jerk signal (from the body angular velocity) on X axis

"AggMeanOfTBodyGyroJerkStdY"

Standard Deviation, by Subject and Activity, of the derived Jerk signal (from the body angular velocity) on Y axis

"AggMeanOfTBodyGyroJerkStdZ"

Standard Deviation, by Subject and Activity, of the derived Jerk signal (from the body angular velocity) on Z axis

"AggMeanOfTBodyAccMagStd"

Standard Deviation, by Subject and Activity, of the magnitude (Euclidean norm) of the body acceleration

"AggMeanOfTGravityAccMagStd"

Standard Deviation, by Subject and Activity, of the magnitude (Euclidean norm) of the gravity acceleration.

"AggMeanOfTBodyAccJerkMagStd"

Standard Deviation, by Subject and Activity, of the magnitude (Euclidean norm) of the derived Jerk signal (from the body linear acceleration).

"AggMeanOfTBodyGyroMagStd"

Standard Deviation, by Subject and Activity, of the magnitude (Euclidean norm) of the Mean body angular velocity.

"AggMeanOfTBodyGyroJerkMagStd"

Standard Deviation, by Subject and Activity, of the magnitude (Euclidean norm) of the derived Jerk signal (from the body angular velocity).