Data Dictionary - Course Project

Activity - character(17)

Laying

Sitting

Standing

Walking

Walking Downstairs

Walking Upstairs

TimeBodyAccelerationMagnitudeMean - numeric(6,3) ranges from -1 to 1

Mean of the magnitude of the body linear acceleration portion of the time domain signal. (Magnitude calculated using the Euclidean norm)

TimeGravityAccelerationMagnitudeMean - numeric(6,3) ranges from -1 to 1

Mean of the magnitude of the gravity accelertaion portion of the time domain signal. (Magnitude calculated using the Euclidean norm)

TimeBodyAccelerationJerkMagnitudeMean - numeric(6,3) ranges from -1 to 1

Mean of the magnitude of the Jerk signal of the body linear acceleration of the time domain signal. (Magnitude calculated using the Euclidean norm)

TimeBodyAngularVelocityMagnitudeMean - numeric(6,3) ranges from -1 to 1

Mean of the magnitude of the angular velocity of the time domain signal. (Magnitude calculated using the Euclidean norm)

TimeBodyAngularVelocityJerkMagnitudeMean - numeric(6,3) ranges from -1 to 1

Mean of the magnitude of the Jerk signal of the angular velocity of the time domain signal. (Magnitude calculated using the Euclidean norm)

FreqBodyAccelerationMagnitudeMean - numeric(6,3) ranges from -1 to 1

Fast Fourier Transform of the mean of the magnitude of the body linear acceleration signal - frequency domain signal. (Magnitude calculated using the Euclidean norm)

FreqBodyAccelerationJerkMagnitudeMean - numeric(6,3) ranges from -1 to 1

Fast Fourier Transform of the mean of the magnitude of the Jerk signal of the body linear acceleration signal - frequency domain signal. (Magnitude calculated using the Euclidean norm)

FreqBodyAngularVelocityMagnitudeMean - numeric(6,3) ranges from -1 to 1

Fast Fourier Transform of the mean of the magnitude of the angular velocity signal - frequency domain signal. (Magnitude calculated using the Euclidean norm)

FreqBodyAngularVelocityJerkMagnitudeMean - numeric(6,3) ranges from -1 to 1

Fast Fourier Transform of the mean of the magnitude of the Jerk signal of the angular velocity signal - frequency domain signal. (Magnitude calculated using the Euclidean norm)

TimeBodyAccelerationMagnitudeStd - numeric(6,3) ranges from -1 to 1

Standard deviation of the magnitude of the body linear acceleration portion of the time domain signal. (Magnitude calculated using the Euclidean norm)

TimeGravityAccelerationMagnitudeStd - numeric(6,3) ranges from -1 to 1

Standard deviation of the magnitude of the gravity accelertaion portion of the time domain signal. (Magnitude calculated using the Euclidean norm)

TimeBodyAccelerationJerkMagnitudeStd - numeric(6,3) ranges from -1 to 1

Standard deviation of the magnitude of the Jerk signal of the body linear acceleration of the time domain signal. (Magnitude calculated using the Euclidean norm)

TimeBodyAngularVelocityMagnitudeStd - numeric(6,3) ranges from -1 to 1

Standard deviation of the magnitude of the angular velocity of the time domain signal. (Magnitude calculated using the Euclidean norm)

TimeBodyAngularVelocityJerkMagnitudeStd - numeric(6,3) ranges from -1 to 1

Standard deviation of the magnitude of the Jerk signal of the angular velocity of the time domain signal. (Magnitude calculated using the Euclidean norm)

FreqBodyAccelerationMagnitudeStd - numeric(6,3) ranges from -1 to 1

Fast Fourier Transform of the Standard deviation of the magnitude of the body linear acceleration signal - frequency domain signal. (Magnitude calculated using the Euclidean norm)

FreqBodyAccelerationJerkMagnitudeStd - numeric(6,3) ranges from -1 to 1

Fast Fourier Transform of the Standard deviation of the magnitude of the Jerk signal of the body linear acceleration signal - frequency domain signal. (Magnitude calculated using the Euclidean norm)

FreqBodyAngularVelocityMagnitudeStd - numeric(6,3) ranges from -1 to 1

Fast Fourier Transform of the Standard deviation of the magnitude of the angular velocity signal - frequency domain signal. (Magnitude calculated using the Euclidean norm)

FreqBodyAngularVelocityJerkMagnitudeStd - numeric(6,3) ranges from -1 to 1

Fast Fourier Transform of the Standard deviation of the magnitude of the Jerk signal of the angular velocity signal - frequency domain signal. (Magnitude calculated using the Euclidean norm)

MeanofTimeBodyAccelerationMagnitudeMean - numeric(6,3) ranges from -1 to 1

Mean of the original column of means of the magnitude of the body linear acceleration portion of the time domain signal. (Magnitude calculated using the Euclidean norm)

MeanofTimeGravityAccelerationMagnitudeMean - numeric(6,3) ranges from -1 to 1

Mean of the original column of means of the magnitude of the gravity accelertaion portion of the time domain signal. (Magnitude calculated using the Euclidean norm)

MeanofTimeBodyAccelerationJerkMagnitudeMean - numeric(6,3) ranges from -1 to 1

Mean of the original column of means of the magnitude of the Jerk signal of the body linear acceleration of the time domain signal. (Magnitude calculated using the Euclidean norm)

MeanofTimeBodyAngularVelocityMagnitudeMean - numeric(6,3) ranges from -1 to 1

Mean of the original column of means of the magnitude of the angular velocity of the time domain signal. (Magnitude calculated using the Euclidean norm)

MeanofTimeBodyAngularVelocityJerkMagnitudeMean - numeric(6,3) ranges from -1 to 1

Mean of the original column of means of the magnitude of the Jerk signal of the angular velocity of the time domain signal. (Magnitude calculated using the Euclidean norm)

MeanofFreqBodyAccelerationMagnitudeMean - numeric(6,3) ranges from -1 to 1

Fast Fourier Transform of the mean of the original column of means of the magnitude of the body linear acceleration signal - frequency domain signal. (Magnitude calculated using the Euclidean norm)

MeanofFreqBodyAccelerationJerkMagnitudeMean - numeric(6,3) ranges from -1 to 1

Fast Fourier Transform of the mean of the original column of means of the magnitude of the Jerk signal of the body linear acceleration signal - frequency domain signal. (Magnitude calculated using the Euclidean norm)

MeanofFreqBodyAngularVelocityMagnitudeMean - numeric(6,3) ranges from -1 to 1

Fast Fourier Transform of the mean of the original column of means of the magnitude of the angular velocity signal - frequency domain signal. (Magnitude calculated using the Euclidean norm)

MeanofFreqBodyAngularVelocityJerkMagnitudeMean - numeric(6,3) ranges from -1 to 1

Fast Fourier Transform of the mean of the original column of means of the magnitude of the Jerk signal of the angular velocity signal - frequency domain signal. (Magnitude calculated using the Euclidean norm)

MeanofTimeBodyAccelerationMagnitudeStd - numeric(6,3) ranges from -1 to 1

Mean of the original column of standard deviations of the magnitude of the body linear acceleration portion of the time domain signal. (Magnitude calculated using the Euclidean norm)

MeanofTimeGravityAccelerationMagnitudeStd - numeric(6,3) ranges from -1 to 1

Mean of the original column of standard deviations of the magnitude of the gravity accelertaion portion of the time domain signal. (Magnitude calculated using the Euclidean norm)

MeanofTimeBodyAccelerationJerkMagnitudeStd - numeric(6,3) ranges from -1 to 1

Mean of the original column of standard deviations of the magnitude of the Jerk signal of the body linear acceleration of the time domain signal. (Magnitude calculated using the Euclidean norm)

MeanofTimeBodyAngularVelocityMagnitudeStd - numeric(6,3) ranges from -1 to 1

Mean of the original column of standard deviations of the magnitude of the angular velocity of the time domain signal. (Magnitude calculated using the Euclidean norm)

MeanofTimeBodyAngularVelocityJerkMagnitudeStd - numeric(6,3) ranges from -1 to 1

Mean of the original column of standard deviations of the magnitude of the Jerk signal of the angular velocity of the time domain signal. (Magnitude calculated using the Euclidean norm)

MeanofFreqBodyAccelerationMagnitudeStd - numeric(6,3) ranges from -1 to 1

Fast Fourier Transform of the mean of the original column of standard deviations of the magnitude of the body linear acceleration signal - frequency domain signal. (Magnitude calculated using the Euclidean norm)

MeanofFreqBodyAccelerationJerkMagnitudeStd - numeric(6,3) ranges from -1 to 1

Fast Fourier Transform of the mean of the original column of standard deviations of the magnitude of the Jerk signal of the body linear acceleration signal - frequency domain signal. (Magnitude calculated using the Euclidean norm)

MeanofFreqBodyAngularVelocityMagnitudeStd - numeric(6,3) ranges from -1 to 1

Fast Fourier Transform of the mean of the original column of standard deviations of the magnitude of the angular velocity signal - frequency domain signal. (Magnitude calculated using the Euclidean norm)

MeanofFreqBodyAngularVelocityJerkMagnitudeStd - numeric(6,3) ranges from -1 to 1

Fast Fourier Transform of the mean of the original column of standard deviations of the magnitude of the Jerk signal of the angular velocity signal - frequency domain signal. (Magnitude calculated using the Euclidean norm)

- Its activity label was converted from a number between 1 and 6 to the Activity as Described in the first field as stated above.

-The test and training data were merged into one file.

-All data except the mean and std information were removed.

-First output file is Trial\_Data which contains the merged data.

-Second output file is Average\_Data plus columns containing the averages of each original column.