

DATA DICTIONARY – GETTING AND CLEANING DATA PROJECT

SUMMARY FILE

SUBJECT – Unique identifier for the volunteer

ACTIVITY – Description of the activity

ALL OF THE FOLLOWING ARE THE MEANS OF THE VALUES FROM THE ORIGINAL STUDY

The signals come were measured by an accelerometer and gyroscope. They are separated into body and gravity acceleration signals.

The body linear acceleration and angular velocity were derived in time to obtain Jerk signals.

The magnitude of these three-dimensional signals were calculated using the Euclidean norm (denoted by 'Magnitude')

A Fast Fourier Transform (FFT) was applied to some of these signals (denoted by 'frequency')

These signals were used to estimate variables of the feature vector for each pattern:

'-XYZ' is used to denote 3-axial signals in the X, Y and Z directions.

The set of variables that were estimated from these signals are:

Mean(): Mean value

StdDev(): Standard deviation

Complete list of variables is shown below

```
timeBodyAccelerometerMean()X
timeBodyAccelerometerMean()Y
timeBodyAccelerometerMean()Z
timeBodyAccelerometerStdDev()X
timeBodyAccelerometerStdDev()Y
timeBodyAccelerometerStdDev()Z
timeGravityAccelerometerMean()X
timeGravityAccelerometerMean()Y
timeGravityAccelerometerMean()Z
timeGravityAccelerometerStdDev()X
timeGravityAccelerometerStdDev()Y
timeGravityAccelerometerStdDev()Z
timeBodyAccelerometerJerkMean()X
timeBodyAccelerometerJerkMean()Y
timeBodyAccelerometerJerkMean()Z
```

timeBodyAccelerometerJerkStdDev()X
timeBodyAccelerometerJerkStdDev()Y
timeBodyAccelerometerJerkStdDev()Z
timeBodyGyroscopeMean()X
timeBodyGyroscopeMean()Y
timeBodyGyroscopeMean()Z
timeBodyGyroscopeStdDev()X
timeBodyGyroscopeStdDev()Y
timeBodyGyroscopeStdDev()Z
timeBodyGyroscopeJerkMean()X
timeBodyGyroscopeJerkMean()Y
timeBodyGyroscopeJerkMean()Z
timeBodyGyroscopeJerkStdDev()X
timeBodyGyroscopeJerkStdDev()Y
timeBodyGyroscopeJerkStdDev()Z
timeBodyAccelerometerMagnitudeMean()
timeBodyAccelerometerMagnitudeStdDev()
timeGravityAccelerometerMagnitudeMean()
timeGravityAccelerometerMagnitudeStdDev()
timeBodyAccelerometerJerkMagnitudeMean()
timeBodyAccelerometerJerkMagnitudeStdDev()
timeBodyGyroscopeMagnitudeMean()
timeBodyGyroscopeMagnitudeStdDev()
timeBodyGyroscopeJerkMagnitudeMean()
timeBodyGyroscopeJerkMagnitudeStdDev()
frequencyBodyAccelerometerMean()X
frequencyBodyAccelerometerMean()Y
frequencyBodyAccelerometerMean()Z
frequencyBodyAccelerometerStdDev()X
frequencyBodyAccelerometerStdDev()Y
frequencyBodyAccelerometerStdDev()Z
frequencyBodyAccelerometerMeanFrequency()X
frequencyBodyAccelerometerMeanFrequency()Y
frequencyBodyAccelerometerMeanFrequency()Z
frequencyBodyAccelerometerJerkMean()X
frequencyBodyAccelerometerJerkMean()Y
frequencyBodyAccelerometerJerkMean()Z
frequencyBodyAccelerometerJerkStdDev()X
frequencyBodyAccelerometerJerkStdDev()Y
frequencyBodyAccelerometerJerkStdDev()Z
frequencyBodyAccelerometerJerkMeanFrequency()X
frequencyBodyAccelerometerJerkMeanFrequency()Y
frequencyBodyAccelerometerJerkMeanFrequency()Z
frequencyBodyGyroscopeMean()X

frequencyBodyGyroscopeMean()Y
frequencyBodyGyroscopeMean()Z
frequencyBodyGyroscopeStdDev()X
frequencyBodyGyroscopeStdDev()Y
frequencyBodyGyroscopeStdDev()Z
frequencyBodyGyroscopeMeanFrequency()X
frequencyBodyGyroscopeMeanFrequency()Y
frequencyBodyGyroscopeMeanFrequency()Z
frequencyBodyAccelerometerMagnitudeMean()
frequencyBodyAccelerometerMagnitudeStdDev()
frequencyBodyAccelerometerMagnitudeMeanFrequency()
frequencyBodyBodyAccelerometerJerkMagnitudeMean()
frequencyBodyBodyAccelerometerJerkMagnitudeStdDev()
frequencyBodyBodyAccelerometerJerkMagnitudeMeanFrequency()
frequencyBodyBodyGyroscopeMagnitudeMean()
frequencyBodyBodyGyroscopeMagnitudeStdDev()
frequencyBodyBodyGyroscopeMagnitudeMeanFrequency()
frequencyBodyBodyGyroscopeJerkMagnitudeMean()
frequencyBodyBodyGyroscopeJerkMagnitudeStdDev()
frequencyBodyBodyGyroscopeJerkMagnitudeMeanFrequency()