Feature Selection
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The features selected for this database come from the accelerometer and gyroscope 3-axial raw signals tAcc-X

Subsequently, the body linear acceleration and angular velocity were derived in time to obtain Jerk signals (tBoc

Finally a Fast Fourier Transform (FFT) was applied to some of these signals producing fBodyAcc-XYZ, fBodyAc

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. Each value represents the mean of all meas

Column	Observed Values
Activity	WALKING WALKING_UPSTAIRS WALKING_DOWNSTAIRS SITTING STANDING LAYING
Subject	0 < value < 30
tBodyAcc-mean()-X	0 < value < 1
tBodyAcc-mean()-Y	0 < value < 1
tBodyAcc-mean()-Z	0 < value < 1
tBodyAcc-std()-X	0 < value < 1
tBodyAcc-std()-Y	0 < value < 1
tBodyAcc-std()-Z	0 < value < 1
tGravityAcc-mean()-X	0 < value < 1
tGravityAcc-mean()-Y	0 < value < 1
tGravityAcc-mean()-Z	0 < value < 1
tGravityAcc-std()-X	0 < value < 1
tGravityAcc-std()-Y	0 < value < 1
tGravityAcc-std()-Z	0 < value < 1
tBodyAccJerk-mean()-X	0 < value < 1
tBodyAccJerk-mean()-Y	0 < value < 1
tBodyAccJerk-mean()-Z	0 < value < 1
tBodyAccJerk-std()-X	0 < value < 1
tBodyAccJerk-std()-Y	0 < value < 1
tBodyAccJerk-std()-Z	0 < value < 1
tBodyGyro-mean()-X	0 < value < 1
tBodyGyro-mean()-Y	0 < value < 1
tBodyGyro-mean()-Z	0 < value < 1
tBodyGyro-std()-X	0 < value < 1
tBodyGyro-std()-Y	0 < value < 1
tBodyGyro-std()-Z	0 < value < 1

tBodyGyroJerk-mean()-X	0 < value < 1
tBodyGyroJerk-mean()-Y	0 < value < 1
tBodyGyroJerk-mean()-Z	0 < value < 1
tBodyGyroJerk-std()-X	0 < value < 1
tBodyGyroJerk-std()-Y	0 < value < 1
tBodyGyroJerk-std()-Z	0 < value < 1
tBodyAccMag-mean()	0 < value < 1
tBodyAccMag-std()	0 < value < 1
tGravityAccMag-mean()	0 < value < 1
tGravityAccMag-std()	0 < value < 1
tBodyAccJerkMag-mean()	0 < value < 1
tBodyAccJerkMag-std()	0 < value < 1
tBodyGyroMag-mean()	0 < value < 1
tBodyGyroMag-std()	0 < value < 1
tBodyGyroJerkMag-mean()	0 < value < 1
tBodyGyroJerkMag-std()	0 < value < 1
fBodyAcc-mean()-X	0 < value < 1
fBodyAcc-mean()-Y	0 < value < 1
fBodyAcc-mean()-Z	0 < value < 1
fBodyAcc-std()-X	0 < value < 1
fBodyAcc-std()-Y	0 < value < 1
fBodyAcc-std()-Z	0 < value < 1
fBodyAcc-meanFreq()-X	0 < value < 1
fBodyAcc-meanFreq()-Y	0 < value < 1
fBodyAcc-meanFreq()-Z	0 < value < 1
fBodyAccJerk-mean()-X	0 < value < 1
fBodyAccJerk-mean()-Y	0 < value < 1
fBodyAccJerk-mean()-Z	0 < value < 1
fBodyAccJerk-std()-X	0 < value < 1
fBodyAccJerk-std()-Y	0 < value < 1
fBodyAccJerk-std()-Z	0 < value < 1
fBodyAccJerk-meanFreq()-X	0 < value < 1
fBodyAccJerk-meanFreq()-Y	0 < value < 1
fBodyAccJerk-meanFreq()-Z	0 < value < 1
fBodyGyro-mean()-X	0 < value < 1
fBodyGyro-mean()-Y	0 < value < 1
fBodyGyro-mean()-Z	0 < value < 1
fBodyGyro-std()-X	0 < value < 1
fBodyGyro-std()-Y	0 < value < 1
fBodyGyro-std()-Z	0 < value < 1
fBodyGyro-meanFreq()-X	0 < value < 1
fBodyGyro-meanFreq()-Y	0 < value < 1
fBodyGyro-meanFreq()-Z	0 < value < 1
fBodyAccMag-mean()	0 < value < 1
fBodyAccMag-std()	0 < value < 1
fBodyAccMag-meanFreq()	0 < value < 1
fBodyBodyAccJerkMag-mean()	0 < value < 1

fBodyBodyAccJerkMag-std()	0 < value < 1
fBodyBodyAccJerkMag-meanFreq()	0 < value < 1
fBodyBodyGyroMag-mean()	0 < value < 1
fBodyBodyGyroMag-std()	0 < value < 1
fBodyBodyGyroMag-meanFreq()	0 < value < 1
fBodyBodyGyroJerkMag-mean()	0 < value < 1
fBodyBodyGyroJerkMag-std()	0 < value < 1
fBodyBodyGyroJerkMag-meanFreq()	0 < value < 1