**Session 17 Assignment-1**

Weight Lifting Exercise

This human activity recognition research has traditionally focused on discriminating between different activities, i.e. to

predict "which" activity was performed at a specific point in time (like with the Daily Living Activities dataset above).

The approach we propose for the Weight Lifting Exercises dataset is to investigate "how (well)" an activity was

performed by the wearer. The "how (well)" investigation has only received little attention so far, even though it

potentially provides useful information for a large variety of applications, such as sports training.

2. Perform the below given activities:

a. Create classification model using logistic regression model

b. verify model goodness of fit

c. Report the accuracy measures

d. Report the variable importance

e. Report the unimportant variables

f. Interpret the results

g. Visualize the results

setwd("C:/Users/Seshan/Desktop/sv R related/acadgild/assignments/session17")

library(readr)

Example\_WearableComputing\_weight\_lifting\_exercises\_biceps\_curl\_variations1 <-

read.csv("Example\_WearableComputing\_weight\_lifting\_exercises\_biceps\_curl\_variations1.csv",header=

T,na.strings=c(""))

View(Example\_WearableComputing\_weight\_lifting\_exercises\_biceps\_curl\_variations1)

View(Example\_WearableComputing\_weight\_lifting\_exercises\_biceps\_curl\_variations1)

data<-Example\_WearableComputing\_weight\_lifting\_exercises\_biceps\_curl\_variations1

#Example\_WearableComputing\_weight\_lifting\_exercises\_biceps\_curl\_variations1 <-

read.csv("Example\_WearableComputing\_weight\_lifting\_exercises\_biceps\_curl\_variations1.csv",header=

T,na.strings=c(""))

#data<-s <-

read.csv("Example\_WearableComputing\_weight\_lifting\_exercises\_biceps\_curl\_variations1.csv",header=

T,na.strings=c(""))

View(data)

# load libraries

library(caret)

library(randomForest)

library(rpart)

library(rpart.plot)

library(ggplot2)

library(lattice)

library(rattle)

summary(data)

library(C50)

#install.package('devtools') # Only needed if you dont have this installed.

library(devtools)

install\_github('adam-m-mcelhinney/helpRFunctions')

library(helpRFunctions)

names(data)

dim(data)

library(caret)

library(zoo)

library(plyr)

is.na(data)

which(is.na(data))

sum(is.na(data))

colSums(is.na(data))

data[is.na(data)] <- mean(data, na.rm = TRUE)

str(data)

summary(data)

pairs(data[8:15])

# set last (classe) and prior (- classe) column index

last <- as.numeric(ncol(data))

prior <- last - 1

# set variables to numerics for correlation check, except the "classe"

for (i in 1:prior) {

data[,i] <- as.numeric(data[,i])}

# enable multi-core processing

library(doParallel)

#cl <- makeCluster(detectCores())

registerDoParallel()

set.seed(12345)

dataTrain<-data[1:4004,]

dataTest<-data[4005:4024,]

cor.check <- cor(dataTrain[, -c(last)])

diag(cor.check) <- 0

plot( levelplot(cor.check,main ="Correlation matrix for all WLE features in training set",

scales=list(x=list(rot=90), cex=1.0) ))

# logistic regression model:

fit <- glm(classe~.,data = dataTrain,family = binomial(link='logit'))

summary(fit)

library(MASS)

step\_fit <- stepAIC(fit,method='backward')

summary(step\_fit)

confint(step\_fit)

#ANOVA on base model

anova(fit,test = 'Chisq')

#ANOVA from reduced model after applying the Step AIC

anova(step\_fit,test = 'Chisq')

#plot the fitted model

plot(fit$fitted.values)

pred\_link <- predict(fit,newdata = dataTest,type = 'link')

#check for multicollinearity

library(car)

vif(fit)

vif(step\_fit)

library(caret)

#with default prob cut 0.50

dataTest$pred\_classe <- ifelse(pred<0.7,'yes','no')

table(dataTest$pred\_classe,dataTest$classe)

#training split of churn classes

round(table(dataTrain$classe)/nrow(dataTrain),2)\*100

# test split of churn classes

round(table(dataTest$classe)/nrow(dataTest),2)\*100

#predicted split of churn classes

round(table(dataTest$pred\_classe)/nrow(dataTest),2)\*100

#create confusion matrix

confusionMatrix(dataTest$classe,dataTest$classe)

#how do we create a cross validation scheme

control <- trainControl(method = 'repeatedcv',

number = 10,

repeats = 3)

seed <-7

metric <- 'Accuracy'

set.seed(seed)

fit\_default <- train(classe~.,

data = dataTrain,

method = 'glm',

metric = 0,

trControl = control)

print(fit\_default)

library(caret)

varImp(step\_fit)

varImp(fit\_default)

library(devtools)

install\_github("riv","tomasgreif")

install\_github("woe","tomasgreif")

library(woe)

library(riv)

iv\_df <- iv.mult(dataTrain, y="classe", summary=TRUE, verbose=TRUE)

iv\_df

iv <- iv.mult(dataTrain, y="classe", summary=FALSE, verbose=TRUE)

# Plot information value summary

iv.plot.summary(iv\_df)

-0.1697 : 1 -0.08596: 1 -0.10319: 1 -0.00863: 1

-0.20332: 1 -0.1009 : 1 -0.14513: 1 -0.05777: 1

max\_roll\_arm max\_picth\_arm max\_yaw\_arm min\_roll\_arm

Min. :-36.3000 Min. :-164.000 Min. : 0.0000 Min. :-87.1000

1st Qu.: 0.0000 1st Qu.: 0.000 1st Qu.: 0.0000 1st Qu.: 0.0000

Median : 0.0000 Median : 0.000 Median : 0.0000 Median : 0.0000

Mean : 0.2127 Mean : 1.232 Mean : 0.8345 Mean : -0.6085

3rd Qu.: 0.0000 3rd Qu.: 0.000 3rd Qu.: 0.0000 3rd Qu.: 0.0000

Max. : 81.4000 Max. : 180.000 Max. :59.0000 Max. : 35.7000

min\_pitch\_arm min\_yaw\_arm amplitude\_roll\_arm

Min. :-180.000 Min. : 0.0000 Min. : 0.0000

1st Qu.: 0.000 1st Qu.: 0.0000 1st Qu.: 0.0000

Median : 0.000 Median : 0.0000 Median : 0.0000

Mean : -1.213 Mean : 0.2806 Mean : 0.8211

3rd Qu.: 0.000 3rd Qu.: 0.0000 3rd Qu.: 0.0000

Max. : 146.000 Max. :34.0000 Max. :90.0000

amplitude\_pitch\_arm amplitude\_yaw\_arm roll\_dumbbell pitch\_dumbbell

Min. : 0.000 Min. : 0.0000 Min. :-152.782 Min. :-134.73

1st Qu.: 0.000 1st Qu.: 0.0000 1st Qu.: -34.657 1st Qu.: -12.93

Median : 0.000 Median : 0.0000 Median : -2.295 Median : 14.48

Mean : 2.445 Mean : 0.5539 Mean : 3.500 Mean : 5.18

3rd Qu.: 0.000 3rd Qu.: 0.0000 3rd Qu.: 58.014 3rd Qu.: 27.95

Max. :360.000 Max. :52.0000 Max. : 139.729 Max. : 97.28

yaw\_dumbbell kurtosis\_roll\_dumbbell kurtosis\_picth\_dumbbell

Min. :-129.33 Min. :-2.088900 Min. :-2.088900

1st Qu.: 21.35 1st Qu.: 0.000000 1st Qu.: 0.000000

Median : 72.49 Median : 0.000000 Median : 0.000000

Mean : 55.66 Mean : 0.007174 Mean : 0.001251

3rd Qu.: 122.01 3rd Qu.: 0.000000 3rd Qu.: 0.000000

Max. : 152.92 Max. : 7.563300 Max. :11.273400

kurtosis\_yaw\_dumbbell skewness\_roll\_dumbbell skewness\_pitch\_dumbbell

#DIV/0!: 88 Min. :-2.6110000 Min. :-2.050100

0 :3936 1st Qu.: 0.0000000 1st Qu.: 0.000000

Median : 0.0000000 Median : 0.000000

Mean : 0.0003258 Mean :-0.001974

3rd Qu.: 0.0000000 3rd Qu.: 0.000000

Max. : 2.3814000 Max. : 2.783200

skewness\_yaw\_dumbbell max\_roll\_dumbbell max\_picth\_dumbbell

#DIV/0!: 88 Min. :-70.9000 Min. :-84.500

0 :3936 1st Qu.: 0.0000 1st Qu.: 0.000

Median : 0.0000 Median : 0.000

Mean : 0.7494 Mean : 1.927

3rd Qu.: 0.0000 3rd Qu.: 0.000

Max. : 97.3000 Max. :152.900

max\_yaw\_dumbbell min\_roll\_dumbbell min\_pitch\_dumbbell

Min. :-2.100000 Min. :-134.7000 Min. :-129.3000

1st Qu.: 0.000000 1st Qu.: 0.0000 1st Qu.: 0.0000

Median : 0.000000 Median : 0.0000 Median : 0.0000

Mean : 0.007232 Mean : -0.6017 Mean : 0.3381

3rd Qu.: 0.000000 3rd Qu.: 0.0000 3rd Qu.: 0.0000

Max. : 7.600000 Max. : 26.8000 Max. : 122.9000

min\_yaw\_dumbbell amplitude\_roll\_dumbbell amplitude\_pitch\_dumbbell

Min. :-2.100000 Min. : 0.000 Min. : 0.000

1st Qu.: 0.000000 1st Qu.: 0.000 1st Qu.: 0.000

Median : 0.000000 Median : 0.000 Median : 0.000

Mean : 0.007232 Mean : 1.351 Mean : 1.589

3rd Qu.: 0.000000 3rd Qu.: 0.000 3rd Qu.: 0.000

Max. : 7.600000 Max. :171.750 Max. :217.330

amplitude\_yaw\_dumbbell total\_accel\_dumbbell var\_accel\_dumbbell

Min. :0 Min. : 1.00 Min. : 0.0000

1st Qu.:0 1st Qu.: 6.00 1st Qu.: 0.0000

Median :0 Median : 9.00 Median : 0.0000

Mean :0 Mean :12.02 Mean : 0.2074

3rd Qu.:0 3rd Qu.:14.00 3rd Qu.: 0.0000

Max. :0 Max. :37.00 Max. :230.4278

avg\_roll\_dumbbell stddev\_roll\_dumbbell var\_roll\_dumbbell

Min. :-110.93280 Min. : 0.0000 Min. : 0.00

1st Qu.: 0.00000 1st Qu.: 0.0000 1st Qu.: 0.00

Median : 0.00000 Median : 0.0000 Median : 0.00

Mean : 0.05821 Mean : 0.5755 Mean : 29.73

3rd Qu.: 0.00000 3rd Qu.: 0.0000 3rd Qu.: 0.00

Max. : 117.40360 Max. :103.1239 Max. :10634.53

avg\_pitch\_dumbbell stddev\_pitch\_dumbbell var\_pitch\_dumbbell

Min. :-70.91580 Min. : 0.0000 Min. : 0.000

1st Qu.: 0.00000 1st Qu.: 0.0000 1st Qu.: 0.000

Median : 0.00000 Median : 0.0000 Median : 0.000

Mean : 0.07618 Mean : 0.3323 Mean : 7.486

3rd Qu.: 0.00000 3rd Qu.: 0.0000 3rd Qu.: 0.000

Max. : 57.45260 Max. :48.4298 Max. :2345.441

avg\_yaw\_dumbbell stddev\_yaw\_dumbbell var\_yaw\_dumbbell gyros\_dumbbell\_x

Min. :-105.650 Min. : 0.0000 Min. : 0.00 Min. :-1.4300

1st Qu.: 0.000 1st Qu.: 0.0000 1st Qu.: 0.00 1st Qu.:-0.0200

Median : 0.000 Median : 0.0000 Median : 0.00 Median : 0.3200

Mean : 1.117 Mean : 0.4127 Mean : 12.65 Mean : 0.2487

3rd Qu.: 0.000 3rd Qu.: 0.0000 3rd Qu.: 0.00 3rd Qu.: 0.5300

Max. : 129.933 Max. :71.0596 Max. :5049.47 Max. : 1.4800

gyros\_dumbbell\_y gyros\_dumbbell\_z accel\_dumbbell\_x accel\_dumbbell\_y

Min. :-2.04000 Min. :-1.4600 Min. :-237.000 Min. :-163.00

1st Qu.:-0.27000 1st Qu.:-0.3300 1st Qu.: -6.000 1st Qu.: -28.00

Median :-0.06000 Median :-0.1300 Median : 11.000 Median : -2.00

Mean :-0.04674 Mean :-0.1337 Mean : -7.091 Mean : 12.83

3rd Qu.: 0.14000 3rd Qu.: 0.0500 3rd Qu.: 23.000 3rd Qu.: 47.00

Max. : 4.37000 Max. : 1.8900 Max. : 217.000 Max. : 281.00

accel\_dumbbell\_z magnet\_dumbbell\_x magnet\_dumbbell\_y magnet\_dumbbell\_z

Min. :-273.00 Min. :-638.00 Min. :-730.0 Min. :-262.00

1st Qu.: 12.00 1st Qu.:-515.00 1st Qu.:-544.0 1st Qu.:-101.00

Median : 51.00 Median : 107.50 Median :-486.0 Median : -59.00

Mean : 16.63 Mean : 10.55 Mean :-115.7 Mean : -41.12

3rd Qu.: 79.00 3rd Qu.: 506.00 3rd Qu.: 304.0 3rd Qu.: 1.00

Max. : 122.00 Max. : 579.00 Max. : 618.0 Max. : 300.00

roll\_forearm pitch\_forearm yaw\_forearm kurtosis\_roll\_forearm

Min. :-180.0 Min. :-64.00 Min. :-180.00 0 :3936

1st Qu.:-115.0 1st Qu.: 0.00 1st Qu.:-106.00 #DIV/0!: 8

Median : 89.5 Median : 19.70 Median : 83.50 -1.3846: 2

Mean : 36.1 Mean : 18.57 Mean : 17.79 -0.0699: 1

3rd Qu.: 136.0 3rd Qu.: 43.90 3rd Qu.: 108.00 -0.0781: 1

Max. : 180.0 Max. : 86.90 Max. : 180.00 -0.1168: 1

kurtosis\_picth\_forearm kurtosis\_yaw\_forearm skewness\_roll\_forearm

0 :3936 #DIV/0!: 88 0 :3936

#DIV/0!: 8 0 :3936 #DIV/0!: 8

-0.0259: 1 -0.009 : 1

-0.0918: 1 -0.011 : 1

-0.1289: 1 -0.0252: 1

-0.1574: 1 -0.0525: 1

skewness\_pitch\_forearm skewness\_yaw\_forearm max\_roll\_forearm

0 :3937 #DIV/0!: 88 Min. :-63.9000

#DIV/0!: 8 0 :3936 1st Qu.: 0.0000

-0.0428: 1 Median : 0.0000

-0.0673: 1 Mean : 0.7345

-0.0732: 1 3rd Qu.: 0.0000

-0.14 : 1 Max. : 86.9000

max\_picth\_forearm max\_yaw\_forearm min\_roll\_forearm min\_pitch\_forearm

Min. :-152.000 0 :3937 Min. :-64.00000 Min. :-180.00

1st Qu.: 0.000 -1.3 : 14 1st Qu.: 0.00000 1st Qu.: 0.00

Median : 0.000 #DIV/0!: 8 Median : 0.00000 Median : 0.00

Mean : 2.445 -1.5 : 6 Mean : 0.06573 Mean : -1.79

3rd Qu.: 0.000 -0.7 : 5 3rd Qu.: 0.00000 3rd Qu.: 0.00

Max. : 180.000 -0.9 : 5 Max. : 47.50000 Max. : 125.00

min\_yaw\_forearm amplitude\_roll\_forearm amplitude\_pitch\_forearm

0 :3937 Min. : 0.0000 Min. : 0.000

-1.3 : 14 1st Qu.: 0.0000 1st Qu.: 0.000

#DIV/0!: 8 Median : 0.0000 Median : 0.000

-1.5 : 6 Mean : 0.6687 Mean : 4.235

-0.7 : 5 3rd Qu.: 0.0000 3rd Qu.: 0.000

-0.9 : 5 Max. :77.1000 Max. :359.000

amplitude\_yaw\_forearm total\_accel\_forearm var\_accel\_forearm

#DIV/0!: 8 Min. :10.00 Min. : 0.0000

0 :4016 1st Qu.:30.00 1st Qu.: 0.0000

Median :35.00 Median : 0.0000

Mean :34.38 Mean : 0.6562

3rd Qu.:37.00 3rd Qu.: 0.0000

Max. :59.00 Max. :124.1778

avg\_roll\_forearm stddev\_roll\_forearm var\_roll\_forearm

Min. :-145.1395 Min. : 0.000 Min. : 0.0

1st Qu.: 0.0000 1st Qu.: 0.000 1st Qu.: 0.0

Median : 0.0000 Median : 0.000 Median : 0.0

Mean : 0.8809 Mean : 1.482 Mean : 199.9

3rd Qu.: 0.0000 3rd Qu.: 0.000 3rd Qu.: 0.0

Max. : 151.2500 Max. :176.478 Max. :31144.6

avg\_pitch\_forearm stddev\_pitch\_forearm var\_pitch\_forearm

Min. :-63.9000 Min. : 0.0000 Min. : 0.000

1st Qu.: 0.0000 1st Qu.: 0.0000 1st Qu.: 0.000

Median : 0.0000 Median : 0.0000 Median : 0.000

Mean : 0.3827 Mean : 0.2087 Mean : 3.371

3rd Qu.: 0.0000 3rd Qu.: 0.0000 3rd Qu.: 0.000

Max. : 68.1682 Max. :26.7293 Max. :714.453

avg\_yaw\_forearm stddev\_yaw\_forearm var\_yaw\_forearm gyros\_forearm\_x

Min. :-152.3333 Min. : 0.000 Min. : 0.0 Min. :-1.8800

1st Qu.: 0.0000 1st Qu.: 0.000 1st Qu.: 0.0 1st Qu.:-0.1400

Median : 0.0000 Median : 0.000 Median : 0.0 Median : 0.0600

Mean : 0.4121 Mean : 1.354 Mean : 157.2 Mean : 0.1076

3rd Qu.: 0.0000 3rd Qu.: 0.000 3rd Qu.: 0.0 3rd Qu.: 0.4200

Max. : 132.5854 Max. :197.508 Max. :39009.3 Max. : 1.8100

gyros\_forearm\_y gyros\_forearm\_z accel\_forearm\_x

Min. :-5.730000 Min. :-2.58000 Min. :-328.000

1st Qu.:-1.780000 1st Qu.:-0.31000 1st Qu.:-117.000

Median :-0.020000 Median :-0.02000 Median : -6.000

Mean :-0.004108 Mean : 0.09302 Mean : -6.445

3rd Qu.: 1.830000 3rd Qu.: 0.48000 3rd Qu.: 113.000

Max. : 5.170000 Max. : 3.35000 Max. : 279.000

accel\_forearm\_y accel\_forearm\_z magnet\_forearm\_x magnet\_forearm\_y

Min. :-467.00 Min. :-366 Min. :-1160.0 Min. :-725.0

1st Qu.: 75.75 1st Qu.:-210 1st Qu.: -589.0 1st Qu.: -76.0

Median : 229.50 Median :-181 Median : -330.5 Median : 653.0

Mean : 171.47 Mean :-163 Mean : -348.7 Mean : 358.6

3rd Qu.: 297.00 3rd Qu.:-150 3rd Qu.: -152.0 3rd Qu.: 747.0

Max. : 575.00 Max. : 239 Max. : 413.0 Max. :1440.0

magnet\_forearm\_z classe

Min. :-876.0 A:1365

1st Qu.: 370.8 B: 901

Median : 560.0 C: 112

Mean : 475.2 D: 276

3rd Qu.: 670.0 E:1370

Max. :1040.0

[ reached getOption("max.print") -- omitted 1 row ]

> pairs(data[8:15])

> # set last (classe) and prior (- classe) column index

> last <- as.numeric(ncol(data))

> prior <- last - 1

> # set variables to numerics for correlation check, except the "classe"

> for (i in 1:prior) {

+ data[,i] <- as.numeric(data[,i])}

>

> # enable multi-core processing

> library(doParallel)

Loading required package: foreach

Loading required package: iterators

Loading required package: parallel

> #cl <- makeCluster(detectCores())

> registerDoParallel()

> set.seed(12345)

> dataTrain<-data[1:4004,]

> dataTest<-data[4005:4024,]

> cor.check <- cor(dataTrain[, -c(last)])

Warning message:

In cor(dataTrain[, -c(last)]) : the standard deviation is zero

> diag(cor.check) <- 0

> plot( levelplot(cor.check,main ="Correlation matrix for all WLE features in

training set",

+ scales=list(x=list(rot=90), cex=1.0) ))

> # logistic regression model:

> fit <- glm(classe~.,data = dataTrain,family = binomial(link='logit'))

Warning messages:

1: In drawDetails(x, recording = FALSE) : reached elapsed time limit

2: glm.fit: algorithm did not converge

3: glm.fit: fitted probabilities numerically 0 or 1 occurred

> summary(fit)

Call:

glm(formula = classe ~ ., family = binomial(link = "logit"),

data = dataTrain)

Deviance Residuals:

Min 1Q Median 3Q Max

-3.063e-04 -2.000e-08 2.000e-08 2.000e-08 3.324e-04

Coefficients: (14 not defined because of singularities)

Estimate Std. Error z value Pr(>|z|)

(Intercept) 4.576e+05 1.230e+09 0.000 1.000

user\_name -5.210e+01 1.849e+05 0.000 1.000

raw\_timestamp\_part\_1 -3.450e-04 9.293e-01 0.000 1.000

raw\_timestamp\_part\_2 1.045e-05 2.451e-02 0.000 1.000

cvtd\_timestamp -2.202e+01 8.060e+04 0.000 1.000

new\_window -7.584e+02 6.402e+06 0.000 1.000

num\_window 6.767e+00 3.520e+03 0.002 0.998

roll\_belt 8.705e-01 3.350e+03 0.000 1.000

pitch\_belt 3.321e+00 5.762e+03 0.001 1.000

yaw\_belt 9.784e-02 9.781e+02 0.000 1.000

total\_accel\_belt -4.044e+00 1.389e+04 0.000 1.000

kurtosis\_roll\_belt 1.507e+03 2.120e+07 0.000 1.000

kurtosis\_picth\_belt -3.102e+00 4.225e+04 0.000 1.000

kurtosis\_yaw\_belt NA NA NA NA

skewness\_roll\_belt 6.595e+01 6.259e+05 0.000 1.000

skewness\_roll\_belt.1 7.315e-01 1.152e+04 0.000 1.000

skewness\_yaw\_belt NA NA NA NA

max\_roll\_belt -2.531e+02 6.233e+06 0.000 1.000

max\_picth\_belt -3.091e+01 4.399e+05 0.000 1.000

max\_yaw\_belt -1.502e+03 2.121e+07 0.000 1.000

min\_roll\_belt 2.082e+02 5.222e+06 0.000 1.000

min\_pitch\_belt 9.599e+01 8.100e+05 0.000 1.000

min\_yaw\_belt NA NA NA NA

amplitude\_roll\_belt 3.149e+02 5.852e+06 0.000 1.000

amplitude\_pitch\_belt NA NA NA NA

amplitude\_yaw\_belt NA NA NA NA

var\_total\_accel\_belt 8.926e+01 9.288e+05 0.000 1.000

avg\_roll\_belt -7.727e-01 4.312e+04 0.000 1.000

stddev\_roll\_belt -9.439e+01 1.708e+06 0.000 1.000

var\_roll\_belt 6.176e+00 1.642e+05 0.000 1.000

avg\_pitch\_belt -1.398e+01 1.418e+05 0.000 1.000

stddev\_pitch\_belt 2.683e+02 2.000e+06 0.000 1.000

var\_pitch\_belt -9.808e+01 6.833e+05 0.000 1.000

avg\_yaw\_belt 3.630e+01 1.475e+06 0.000 1.000

stddev\_yaw\_belt -2.057e+02 2.243e+06 0.000 1.000

var\_yaw\_belt 1.584e-01 5.367e+03 0.000 1.000

gyros\_belt\_x 1.753e+00 1.607e+05 0.000 1.000

gyros\_belt\_y 2.195e+02 4.206e+05 0.001 1.000

gyros\_belt\_z -2.904e+01 1.310e+05 0.000 1.000

accel\_belt\_x 3.496e-01 1.758e+03 0.000 1.000

accel\_belt\_y 7.420e-01 2.353e+03 0.000 1.000

accel\_belt\_z -2.403e-02 2.343e+03 0.000 1.000

magnet\_belt\_x 3.766e-01 7.941e+02 0.000 1.000

magnet\_belt\_y 1.431e-01 1.516e+03 0.000 1.000

magnet\_belt\_z 3.060e-01 6.958e+02 0.000 1.000

roll\_arm -2.981e-02 1.211e+02 0.000 1.000

pitch\_arm -8.005e-01 8.714e+02 -0.001 0.999

yaw\_arm -7.708e-03 1.841e+02 0.000 1.000

total\_accel\_arm -4.613e-01 2.165e+03 0.000 1.000

var\_accel\_arm 2.124e+00 1.331e+04 0.000 1.000

avg\_roll\_arm -3.244e-02 6.289e+03 0.000 1.000

stddev\_roll\_arm -2.489e+00 4.218e+04 0.000 1.000

var\_roll\_arm 6.343e-03 2.574e+02 0.000 1.000

avg\_pitch\_arm -8.205e+00 1.062e+05 0.000 1.000

stddev\_pitch\_arm -3.290e+01 3.973e+05 0.000 1.000

var\_pitch\_arm 2.911e-01 3.677e+03 0.000 1.000

avg\_yaw\_arm -2.145e+00 1.631e+04 0.000 1.000

stddev\_yaw\_arm -4.885e+00 5.553e+04 0.000 1.000

var\_yaw\_arm 1.409e-02 3.264e+02 0.000 1.000

gyros\_arm\_x -6.674e+00 2.568e+04 0.000 1.000

gyros\_arm\_y -1.575e+01 5.820e+04 0.000 1.000

gyros\_arm\_z 1.132e+01 2.980e+04 0.000 1.000

accel\_arm\_x -2.149e-01 5.207e+02 0.000 1.000

accel\_arm\_y 6.879e-01 7.116e+02 0.001 0.999

accel\_arm\_z -2.381e-01 3.828e+02 -0.001 1.000

magnet\_arm\_x -5.615e-02 1.698e+02 0.000 1.000

magnet\_arm\_y -3.838e-01 4.520e+02 -0.001 0.999

magnet\_arm\_z 6.498e-02 2.805e+02 0.000 1.000

kurtosis\_roll\_arm 2.298e+00 1.475e+04 0.000 1.000

kurtosis\_picth\_arm -2.025e-02 9.916e+03 0.000 1.000

kurtosis\_yaw\_arm -1.043e+00 1.703e+04 0.000 1.000

skewness\_roll\_arm -9.194e-01 1.852e+04 0.000 1.000

skewness\_pitch\_arm -1.525e+00 2.065e+04 0.000 1.000

skewness\_yaw\_arm -4.074e-01 1.177e+04 0.000 1.000

max\_roll\_arm 8.219e+02 2.250e+07 0.000 1.000

max\_picth\_arm -5.548e+02 2.652e+07 0.000 1.000

max\_yaw\_arm -7.559e+00 9.583e+04 0.000 1.000

min\_roll\_arm -8.105e+02 2.244e+07 0.000 1.000

min\_pitch\_arm 5.575e+02 2.652e+07 0.000 1.000

min\_yaw\_arm 1.055e+01 9.002e+04 0.000 1.000

amplitude\_roll\_arm -8.030e+02 2.238e+07 0.000 1.000

amplitude\_pitch\_arm 5.576e+02 2.652e+07 0.000 1.000

amplitude\_yaw\_arm NA NA NA NA

roll\_dumbbell 3.117e-01 6.437e+02 0.000 1.000

pitch\_dumbbell -6.753e-01 1.728e+03 0.000 1.000

yaw\_dumbbell 1.263e-01 4.711e+02 0.000 1.000

kurtosis\_roll\_dumbbell 1.012e+02 9.264e+06 0.000 1.000

kurtosis\_picth\_dumbbell -8.040e-01 1.266e+05 0.000 1.000

kurtosis\_yaw\_dumbbell NA NA NA NA

skewness\_roll\_dumbbell -8.218e+01 9.959e+05 0.000 1.000

skewness\_pitch\_dumbbell -6.297e+01 7.874e+05 0.000 1.000

skewness\_yaw\_dumbbell NA NA NA NA

max\_roll\_dumbbell 1.122e+03 9.951e+06 0.000 1.000

max\_picth\_dumbbell -2.243e+02 4.617e+06 0.000 1.000

max\_yaw\_dumbbell -8.495e+01 9.121e+06 0.000 1.000

min\_roll\_dumbbell -1.114e+03 9.887e+06 0.000 1.000

min\_pitch\_dumbbell 2.223e+02 4.614e+06 0.000 1.000

min\_yaw\_dumbbell NA NA NA NA

amplitude\_roll\_dumbbell -1.119e+03 9.932e+06 0.000 1.000

amplitude\_pitch\_dumbbell 2.190e+02 4.642e+06 0.000 1.000

amplitude\_yaw\_dumbbell NA NA NA NA

total\_accel\_dumbbell 2.634e+00 8.124e+03 0.000 1.000

var\_accel\_dumbbell 9.387e-01 1.293e+04 0.000 1.000

avg\_roll\_dumbbell 3.209e-01 1.170e+04 0.000 1.000

stddev\_roll\_dumbbell 3.826e+00 1.714e+05 0.000 1.000

var\_roll\_dumbbell -6.532e-03 1.294e+03 0.000 1.000

avg\_pitch\_dumbbell -9.252e+00 9.790e+04 0.000 1.000

stddev\_pitch\_dumbbell 7.252e+00 2.285e+05 0.000 1.000

var\_pitch\_dumbbell -8.990e-02 3.544e+03 0.000 1.000

avg\_yaw\_dumbbell 2.326e+00 3.002e+04 0.000 1.000

stddev\_yaw\_dumbbell 8.080e+00 1.707e+05 0.000 1.000

var\_yaw\_dumbbell -1.969e-02 1.225e+03 0.000 1.000

gyros\_dumbbell\_x -2.620e+00 5.656e+04 0.000 1.000

gyros\_dumbbell\_y 2.166e+00 3.581e+04 0.000 1.000

gyros\_dumbbell\_z 1.283e+01 5.726e+04 0.000 1.000

accel\_dumbbell\_x 7.158e-01 1.706e+03 0.000 1.000

accel\_dumbbell\_y -2.493e-01 9.631e+02 0.000 1.000

accel\_dumbbell\_z -2.423e-01 1.084e+03 0.000 1.000

magnet\_dumbbell\_x -1.128e-01 3.596e+02 0.000 1.000

magnet\_dumbbell\_y -2.477e-02 5.858e+02 0.000 1.000

magnet\_dumbbell\_z 2.711e-03 7.102e+02 0.000 1.000

roll\_forearm -7.360e-03 1.904e+02 0.000 1.000

pitch\_forearm 9.473e-01 1.582e+03 0.001 1.000

yaw\_forearm 4.287e-02 1.896e+02 0.000 1.000

kurtosis\_roll\_forearm 7.332e+00 1.101e+05 0.000 1.000

kurtosis\_picth\_forearm 6.396e-01 1.035e+04 0.000 1.000

kurtosis\_yaw\_forearm NA NA NA NA

skewness\_roll\_forearm 5.414e-01 2.195e+04 0.000 1.000

skewness\_pitch\_forearm 6.050e-01 1.714e+04 0.000 1.000

skewness\_yaw\_forearm NA NA NA NA

max\_roll\_forearm 7.359e+02 5.512e+06 0.000 1.000

max\_picth\_forearm -7.005e-01 1.555e+04 0.000 1.000

max\_yaw\_forearm -3.109e+01 4.583e+05 0.000 1.000

min\_roll\_forearm -7.347e+02 5.555e+06 0.000 1.000

min\_pitch\_forearm -1.021e+00 7.942e+03 0.000 1.000

min\_yaw\_forearm NA NA NA NA

amplitude\_roll\_forearm -7.491e+02 5.527e+06 0.000 1.000

amplitude\_pitch\_forearm NA NA NA NA

amplitude\_yaw\_forearm -1.610e+02 1.679e+06 0.000 1.000

total\_accel\_forearm 8.335e-01 5.021e+03 0.000 1.000

var\_accel\_forearm -9.501e-01 1.683e+04 0.000 1.000

avg\_roll\_forearm -3.053e+00 3.370e+04 0.000 1.000

stddev\_roll\_forearm -9.505e-01 3.371e+04 0.000 1.000

var\_roll\_forearm 9.389e-03 2.038e+02 0.000 1.000

avg\_pitch\_forearm -2.479e+00 1.298e+05 0.000 1.000

stddev\_pitch\_forearm 6.353e+01 3.663e+05 0.000 1.000

var\_pitch\_forearm -1.023e+00 7.995e+03 0.000 1.000

avg\_yaw\_forearm 3.378e+00 4.000e+04 0.000 1.000

stddev\_yaw\_forearm -4.433e+00 8.123e+04 0.000 1.000

var\_yaw\_forearm 2.646e-02 3.863e+02 0.000 1.000

gyros\_forearm\_x 1.456e+01 5.911e+04 0.000 1.000

gyros\_forearm\_y -6.460e+00 1.369e+04 0.000 1.000

gyros\_forearm\_z 2.089e+01 3.623e+04 0.001 1.000

accel\_forearm\_x -1.600e-01 3.288e+02 0.000 1.000

accel\_forearm\_y -2.062e-01 5.004e+02 0.000 1.000

accel\_forearm\_z -2.349e-01 5.413e+02 0.000 1.000

magnet\_forearm\_x 1.437e-01 1.610e+02 0.001 0.999

magnet\_forearm\_y 1.355e-02 1.972e+02 0.000 1.000

magnet\_forearm\_z 1.891e-01 1.861e+02 0.001 0.999

(Dispersion parameter for binomial family taken to be 1)

Null deviance: 5.1382e+03 on 4003 degrees of freedom

Residual deviance: 3.3492e-07 on 3859 degrees of freedom

AIC: 290

Number of Fisher Scoring iterations: 25

> library(MASS)

> step\_fit <- stepAIC(fit,method='backward')

Start: AIC=290

classe ~ user\_name + raw\_timestamp\_part\_1 + raw\_timestamp\_part\_2 +

cvtd\_timestamp + new\_window + num\_window + roll\_belt + pitch\_belt +

yaw\_belt + total\_accel\_belt + kurtosis\_roll\_belt + kurtosis\_picth\_belt +

kurtosis\_yaw\_belt + skewness\_roll\_belt + skewness\_roll\_belt.1 +

skewness\_yaw\_belt + max\_roll\_belt + max\_picth\_belt + max\_yaw\_belt +

min\_roll\_belt + min\_pitch\_belt + min\_yaw\_belt + amplitude\_roll\_belt +

amplitude\_pitch\_belt + amplitude\_yaw\_belt + var\_total\_accel\_belt +

avg\_roll\_belt + stddev\_roll\_belt + var\_roll\_belt + avg\_pitch\_belt +

stddev\_pitch\_belt + var\_pitch\_belt + avg\_yaw\_belt + stddev\_yaw\_belt +

var\_yaw\_belt + gyros\_belt\_x + gyros\_belt\_y + gyros\_belt\_z +

accel\_belt\_x + accel\_belt\_y + accel\_belt\_z + magnet\_belt\_x +

magnet\_belt\_y + magnet\_belt\_z + roll\_arm + pitch\_arm + yaw\_arm +

total\_accel\_arm + var\_accel\_arm + avg\_roll\_arm + stddev\_roll\_arm +

var\_roll\_arm + avg\_pitch\_arm + stddev\_pitch\_arm + var\_pitch\_arm +

avg\_yaw\_arm + stddev\_yaw\_arm + var\_yaw\_arm + gyros\_arm\_x +

gyros\_arm\_y + gyros\_arm\_z + accel\_arm\_x + accel\_arm\_y + accel\_arm\_z +

magnet\_arm\_x + magnet\_arm\_y + magnet\_arm\_z + kurtosis\_roll\_arm +

kurtosis\_picth\_arm + kurtosis\_yaw\_arm + skewness\_roll\_arm +

skewness\_pitch\_arm + skewness\_yaw\_arm + max\_roll\_arm + max\_picth\_arm +

max\_yaw\_arm + min\_roll\_arm + min\_pitch\_arm + min\_yaw\_arm +

amplitude\_roll\_arm + amplitude\_pitch\_arm + amplitude\_yaw\_arm +

roll\_dumbbell + pitch\_dumbbell + yaw\_dumbbell + kurtosis\_roll\_dumbbell +

kurtosis\_picth\_dumbbell + kurtosis\_yaw\_dumbbell + skewness\_roll\_dumbbell

+

skewness\_pitch\_dumbbell + skewness\_yaw\_dumbbell + max\_roll\_dumbbell +

max\_picth\_dumbbell + max\_yaw\_dumbbell + min\_roll\_dumbbell +

min\_pitch\_dumbbell + min\_yaw\_dumbbell + amplitude\_roll\_dumbbell +

amplitude\_pitch\_dumbbell + amplitude\_yaw\_dumbbell + total\_accel\_dumbbell

+

var\_accel\_dumbbell + avg\_roll\_dumbbell + stddev\_roll\_dumbbell +

var\_roll\_dumbbell + avg\_pitch\_dumbbell + stddev\_pitch\_dumbbell +

var\_pitch\_dumbbell + avg\_yaw\_dumbbell + stddev\_yaw\_dumbbell +

var\_yaw\_dumbbell + gyros\_dumbbell\_x + gyros\_dumbbell\_y +

gyros\_dumbbell\_z + accel\_dumbbell\_x + accel\_dumbbell\_y +

accel\_dumbbell\_z + magnet\_dumbbell\_x + magnet\_dumbbell\_y +

magnet\_dumbbell\_z + roll\_forearm + pitch\_forearm + yaw\_forearm +

kurtosis\_roll\_forearm + kurtosis\_picth\_forearm + kurtosis\_yaw\_forearm +

skewness\_roll\_forearm + skewness\_pitch\_forearm + skewness\_yaw\_forearm +

max\_roll\_forearm + max\_picth\_forearm + max\_yaw\_forearm +

min\_roll\_forearm + min\_pitch\_forearm + min\_yaw\_forearm +

amplitude\_roll\_forearm + amplitude\_pitch\_forearm + amplitude\_yaw\_forearm

+

total\_accel\_forearm + var\_accel\_forearm + avg\_roll\_forearm +

stddev\_roll\_forearm + var\_roll\_forearm + avg\_pitch\_forearm +

stddev\_pitch\_forearm + var\_pitch\_forearm + avg\_yaw\_forearm +

stddev\_yaw\_forearm + var\_yaw\_forearm + gyros\_forearm\_x +

gyros\_forearm\_y + gyros\_forearm\_z + accel\_forearm\_x + accel\_forearm\_y +

accel\_forearm\_z + magnet\_forearm\_x + magnet\_forearm\_y + magnet\_forearm\_z

Step: AIC=290

classe ~ user\_name + raw\_timestamp\_part\_1 + raw\_timestamp\_part\_2 +

cvtd\_timestamp + new\_window + num\_window + roll\_belt + pitch\_belt +

yaw\_belt + total\_accel\_belt + kurtosis\_roll\_belt + kurtosis\_picth\_belt +

kurtosis\_yaw\_belt + skewness\_roll\_belt + skewness\_roll\_belt.1 +

skewness\_yaw\_belt + max\_roll\_belt + max\_picth\_belt + max\_yaw\_belt +

min\_roll\_belt + min\_pitch\_belt + min\_yaw\_belt + amplitude\_roll\_belt +

amplitude\_pitch\_belt + amplitude\_yaw\_belt + var\_total\_accel\_belt +

avg\_roll\_belt + stddev\_roll\_belt + var\_roll\_belt + avg\_pitch\_belt +

stddev\_pitch\_belt + var\_pitch\_belt + avg\_yaw\_belt + stddev\_yaw\_belt +

var\_yaw\_belt + gyros\_belt\_x + gyros\_belt\_y + gyros\_belt\_z +

accel\_belt\_x + accel\_belt\_y + accel\_belt\_z + magnet\_belt\_x +

magnet\_belt\_y + magnet\_belt\_z + roll\_arm + pitch\_arm + yaw\_arm +

total\_accel\_arm + var\_accel\_arm + avg\_roll\_arm + stddev\_roll\_arm +

var\_roll\_arm + avg\_pitch\_arm + stddev\_pitch\_arm + var\_pitch\_arm +

avg\_yaw\_arm + stddev\_yaw\_arm + var\_yaw\_arm + gyros\_arm\_x +

gyros\_arm\_y + gyros\_arm\_z + accel\_arm\_x + accel\_arm\_y + accel\_arm\_z +

magnet\_arm\_x + magnet\_arm\_y + magnet\_arm\_z + kurtosis\_roll\_arm +

kurtosis\_picth\_arm + kurtosis\_yaw\_arm + skewness\_roll\_arm +

skewness\_pitch\_arm + skewness\_yaw\_arm + max\_roll\_arm + max\_picth\_arm +

max\_yaw\_arm + min\_roll\_arm + min\_pitch\_arm + min\_yaw\_arm +

amplitude\_roll\_arm + amplitude\_pitch\_arm + amplitude\_yaw\_arm +

roll\_dumbbell + pitch\_dumbbell + yaw\_dumbbell + kurtosis\_roll\_dumbbell +

kurtosis\_picth\_dumbbell + kurtosis\_yaw\_dumbbell + skewness\_roll\_dumbbell

+

skewness\_pitch\_dumbbell + skewness\_yaw\_dumbbell + max\_roll\_dumbbell +

max\_picth\_dumbbell + max\_yaw\_dumbbell + min\_roll\_dumbbell +

min\_pitch\_dumbbell + min\_yaw\_dumbbell + amplitude\_roll\_dumbbell +

amplitude\_pitch\_dumbbell + amplitude\_yaw\_dumbbell + total\_accel\_dumbbell

+

var\_accel\_dumbbell + avg\_roll\_dumbbell + stddev\_roll\_dumbbell +

var\_roll\_dumbbell + avg\_pitch\_dumbbell + stddev\_pitch\_dumbbell +

var\_pitch\_dumbbell + avg\_yaw\_dumbbell + stddev\_yaw\_dumbbell +

var\_yaw\_dumbbell + gyros\_dumbbell\_x + gyros\_dumbbell\_y +

gyros\_dumbbell\_z + accel\_dumbbell\_x + accel\_dumbbell\_y +

accel\_dumbbell\_z + magnet\_dumbbell\_x + magnet\_dumbbell\_y +

magnet\_dumbbell\_z + roll\_forearm + pitch\_forearm + yaw\_forearm +

kurtosis\_roll\_forearm + kurtosis\_picth\_forearm + kurtosis\_yaw\_forearm +

skewness\_roll\_forearm + skewness\_pitch\_forearm + skewness\_yaw\_forearm +

max\_roll\_forearm + max\_picth\_forearm + max\_yaw\_forearm +

min\_roll\_forearm + min\_pitch\_forearm + min\_yaw\_forearm +

amplitude\_roll\_forearm + amplitude\_yaw\_forearm + total\_accel\_forearm +

var\_accel\_forearm + avg\_roll\_forearm + stddev\_roll\_forearm +

var\_roll\_forearm + avg\_pitch\_forearm + stddev\_pitch\_forearm +

var\_pitch\_forearm + avg\_yaw\_forearm + stddev\_yaw\_forearm +

var\_yaw\_forearm + gyros\_forearm\_x + gyros\_forearm\_y + gyros\_forearm\_z +

accel\_forearm\_x + accel\_forearm\_y + accel\_forearm\_z + magnet\_forearm\_x +

magnet\_forearm\_y + magnet\_forearm\_z

Step: AIC=290

classe ~ user\_name + raw\_timestamp\_part\_1 + raw\_timestamp\_part\_2 +

cvtd\_timestamp + new\_window + num\_window + roll\_belt + pitch\_belt +

yaw\_belt + total\_accel\_belt + kurtosis\_roll\_belt + kurtosis\_picth\_belt +

kurtosis\_yaw\_belt + skewness\_roll\_belt + skewness\_roll\_belt.1 +

skewness\_yaw\_belt + max\_roll\_belt + max\_picth\_belt + max\_yaw\_belt +

min\_roll\_belt + min\_pitch\_belt + min\_yaw\_belt + amplitude\_roll\_belt +

amplitude\_pitch\_belt + amplitude\_yaw\_belt + var\_total\_accel\_belt +

avg\_roll\_belt + stddev\_roll\_belt + var\_roll\_belt + avg\_pitch\_belt +

stddev\_pitch\_belt + var\_pitch\_belt + avg\_yaw\_belt + stddev\_yaw\_belt +

var\_yaw\_belt + gyros\_belt\_x + gyros\_belt\_y + gyros\_belt\_z +

accel\_belt\_x + accel\_belt\_y + accel\_belt\_z + magnet\_belt\_x +

magnet\_belt\_y + magnet\_belt\_z + roll\_arm + pitch\_arm + yaw\_arm +

total\_accel\_arm + var\_accel\_arm + avg\_roll\_arm + stddev\_roll\_arm +

var\_roll\_arm + avg\_pitch\_arm + stddev\_pitch\_arm + var\_pitch\_arm +

avg\_yaw\_arm + stddev\_yaw\_arm + var\_yaw\_arm + gyros\_arm\_x +

gyros\_arm\_y + gyros\_arm\_z + accel\_arm\_x + accel\_arm\_y + accel\_arm\_z +

magnet\_arm\_x + magnet\_arm\_y + magnet\_arm\_z + kurtosis\_roll\_arm +

kurtosis\_picth\_arm + kurtosis\_yaw\_arm + skewness\_roll\_arm +

skewness\_pitch\_arm + skewness\_yaw\_arm + max\_roll\_arm + max\_picth\_arm +

max\_yaw\_arm + min\_roll\_arm + min\_pitch\_arm + min\_yaw\_arm +

amplitude\_roll\_arm + amplitude\_pitch\_arm + amplitude\_yaw\_arm +

roll\_dumbbell + pitch\_dumbbell + yaw\_dumbbell + kurtosis\_roll\_dumbbell +

kurtosis\_picth\_dumbbell + kurtosis\_yaw\_dumbbell + skewness\_roll\_dumbbell

+

skewness\_pitch\_dumbbell + skewness\_yaw\_dumbbell + max\_roll\_dumbbell +

max\_picth\_dumbbell + max\_yaw\_dumbbell + min\_roll\_dumbbell +

min\_pitch\_dumbbell + min\_yaw\_dumbbell + amplitude\_roll\_dumbbell +

amplitude\_pitch\_dumbbell + amplitude\_yaw\_dumbbell + total\_accel\_dumbbell

+

var\_accel\_dumbbell + avg\_roll\_dumbbell + stddev\_roll\_dumbbell +

var\_roll\_dumbbell + avg\_pitch\_dumbbell + stddev\_pitch\_dumbbell +

var\_pitch\_dumbbell + avg\_yaw\_dumbbell + stddev\_yaw\_dumbbell +

var\_yaw\_dumbbell + gyros\_dumbbell\_x + gyros\_dumbbell\_y +

gyros\_dumbbell\_z + accel\_dumbbell\_x + accel\_dumbbell\_y +

accel\_dumbbell\_z + magnet\_dumbbell\_x + magnet\_dumbbell\_y +

magnet\_dumbbell\_z + roll\_forearm + pitch\_forearm + yaw\_forearm +

kurtosis\_roll\_forearm + kurtosis\_picth\_forearm + kurtosis\_yaw\_forearm +

skewness\_roll\_forearm + skewness\_pitch\_forearm + skewness\_yaw\_forearm +

max\_roll\_forearm + max\_picth\_forearm + max\_yaw\_forearm +

min\_roll\_forearm + min\_pitch\_forearm + amplitude\_roll\_forearm +

amplitude\_yaw\_forearm + total\_accel\_forearm + var\_accel\_forearm +

avg\_roll\_forearm + stddev\_roll\_forearm + var\_roll\_forearm +

avg\_pitch\_forearm + stddev\_pitch\_forearm + var\_pitch\_forearm +

avg\_yaw\_forearm + stddev\_yaw\_forearm + var\_yaw\_forearm +

gyros\_forearm\_x + gyros\_forearm\_y + gyros\_forearm\_z + accel\_forearm\_x +

accel\_forearm\_y + accel\_forearm\_z + magnet\_forearm\_x + magnet\_forearm\_y +

magnet\_forearm\_z

Step: AIC=290

classe ~ user\_name + raw\_timestamp\_part\_1 + raw\_timestamp\_part\_2 +

cvtd\_timestamp + new\_window + num\_window + roll\_belt + pitch\_belt +

yaw\_belt + total\_accel\_belt + kurtosis\_roll\_belt + kurtosis\_picth\_belt +

kurtosis\_yaw\_belt + skewness\_roll\_belt + skewness\_roll\_belt.1 +

skewness\_yaw\_belt + max\_roll\_belt + max\_picth\_belt + max\_yaw\_belt +

min\_roll\_belt + min\_pitch\_belt + min\_yaw\_belt + amplitude\_roll\_belt +

amplitude\_pitch\_belt + amplitude\_yaw\_belt + var\_total\_accel\_belt +

avg\_roll\_belt + stddev\_roll\_belt + var\_roll\_belt + avg\_pitch\_belt +

stddev\_pitch\_belt + var\_pitch\_belt + avg\_yaw\_belt + stddev\_yaw\_belt +

var\_yaw\_belt + gyros\_belt\_x + gyros\_belt\_y + gyros\_belt\_z +

accel\_belt\_x + accel\_belt\_y + accel\_belt\_z + magnet\_belt\_x +

magnet\_belt\_y + magnet\_belt\_z + roll\_arm + pitch\_arm + yaw\_arm +

total\_accel\_arm + var\_accel\_arm + avg\_roll\_arm + stddev\_roll\_arm +

var\_roll\_arm + avg\_pitch\_arm + stddev\_pitch\_arm + var\_pitch\_arm +

avg\_yaw\_arm + stddev\_yaw\_arm + var\_yaw\_arm + gyros\_arm\_x +

gyros\_arm\_y + gyros\_arm\_z + accel\_arm\_x + accel\_arm\_y + accel\_arm\_z +

magnet\_arm\_x + magnet\_arm\_y + magnet\_arm\_z + kurtosis\_roll\_arm +

kurtosis\_picth\_arm + kurtosis\_yaw\_arm + skewness\_roll\_arm +

skewness\_pitch\_arm + skewness\_yaw\_arm + max\_roll\_arm + max\_picth\_arm +

max\_yaw\_arm + min\_roll\_arm + min\_pitch\_arm + min\_yaw\_arm +

amplitude\_roll\_arm + amplitude\_pitch\_arm + amplitude\_yaw\_arm +

roll\_dumbbell + pitch\_dumbbell + yaw\_dumbbell + kurtosis\_roll\_dumbbell +

kurtosis\_picth\_dumbbell + kurtosis\_yaw\_dumbbell + skewness\_roll\_dumbbell

+

skewness\_pitch\_dumbbell + skewness\_yaw\_dumbbell + max\_roll\_dumbbell +

max\_picth\_dumbbell + max\_yaw\_dumbbell + min\_roll\_dumbbell +

min\_pitch\_dumbbell + min\_yaw\_dumbbell + amplitude\_roll\_dumbbell +

amplitude\_pitch\_dumbbell + amplitude\_yaw\_dumbbell + total\_accel\_dumbbell

+

var\_accel\_dumbbell + avg\_roll\_dumbbell + stddev\_roll\_dumbbell +

var\_roll\_dumbbell + avg\_pitch\_dumbbell + stddev\_pitch\_dumbbell +

var\_pitch\_dumbbell + avg\_yaw\_dumbbell + stddev\_yaw\_dumbbell +

var\_yaw\_dumbbell + gyros\_dumbbell\_x + gyros\_dumbbell\_y +

gyros\_dumbbell\_z + accel\_dumbbell\_x + accel\_dumbbell\_y +

accel\_dumbbell\_z + magnet\_dumbbell\_x + magnet\_dumbbell\_y +

magnet\_dumbbell\_z + roll\_forearm + pitch\_forearm + yaw\_forearm +

kurtosis\_roll\_forearm + kurtosis\_picth\_forearm + kurtosis\_yaw\_forearm +

skewness\_roll\_forearm + skewness\_pitch\_forearm + max\_roll\_forearm +

max\_picth\_forearm + max\_yaw\_forearm + min\_roll\_forearm +

min\_pitch\_forearm + amplitude\_roll\_forearm + amplitude\_yaw\_forearm +

total\_accel\_forearm + var\_accel\_forearm + avg\_roll\_forearm +

stddev\_roll\_forearm + var\_roll\_forearm + avg\_pitch\_forearm +

stddev\_pitch\_forearm + var\_pitch\_forearm + avg\_yaw\_forearm +

stddev\_yaw\_forearm + var\_yaw\_forearm + gyros\_forearm\_x +

gyros\_forearm\_y + gyros\_forearm\_z + accel\_forearm\_x + accel\_forearm\_y +

accel\_forearm\_z + magnet\_forearm\_x + magnet\_forearm\_y + magnet\_forearm\_z

Step: AIC=290

classe ~ user\_name + raw\_timestamp\_part\_1 + raw\_timestamp\_part\_2 +

cvtd\_timestamp + new\_window + num\_window + roll\_belt + pitch\_belt +

yaw\_belt + total\_accel\_belt + kurtosis\_roll\_belt + kurtosis\_picth\_belt +

kurtosis\_yaw\_belt + skewness\_roll\_belt + skewness\_roll\_belt.1 +

skewness\_yaw\_belt + max\_roll\_belt + max\_picth\_belt + max\_yaw\_belt +

min\_roll\_belt + min\_pitch\_belt + min\_yaw\_belt + amplitude\_roll\_belt +

amplitude\_pitch\_belt + amplitude\_yaw\_belt + var\_total\_accel\_belt +

avg\_roll\_belt + stddev\_roll\_belt + var\_roll\_belt + avg\_pitch\_belt +

stddev\_pitch\_belt + var\_pitch\_belt + avg\_yaw\_belt + stddev\_yaw\_belt +

var\_yaw\_belt + gyros\_belt\_x + gyros\_belt\_y + gyros\_belt\_z +

accel\_belt\_x + accel\_belt\_y + accel\_belt\_z + magnet\_belt\_x +

magnet\_belt\_y + magnet\_belt\_z + roll\_arm + pitch\_arm + yaw\_arm +

total\_accel\_arm + var\_accel\_arm + avg\_roll\_arm + stddev\_roll\_arm +

var\_roll\_arm + avg\_pitch\_arm + stddev\_pitch\_arm + var\_pitch\_arm +

avg\_yaw\_arm + stddev\_yaw\_arm + var\_yaw\_arm + gyros\_arm\_x +

gyros\_arm\_y + gyros\_arm\_z + accel\_arm\_x + accel\_arm\_y + accel\_arm\_z +

magnet\_arm\_x + magnet\_arm\_y + magnet\_arm\_z + kurtosis\_roll\_arm +

kurtosis\_picth\_arm + kurtosis\_yaw\_arm + skewness\_roll\_arm +

skewness\_pitch\_arm + skewness\_yaw\_arm + max\_roll\_arm + max\_picth\_arm +

max\_yaw\_arm + min\_roll\_arm + min\_pitch\_arm + min\_yaw\_arm +

amplitude\_roll\_arm + amplitude\_pitch\_arm + amplitude\_yaw\_arm +

roll\_dumbbell + pitch\_dumbbell + yaw\_dumbbell + kurtosis\_roll\_dumbbell +

kurtosis\_picth\_dumbbell + kurtosis\_yaw\_dumbbell + skewness\_roll\_dumbbell

+

skewness\_pitch\_dumbbell + skewness\_yaw\_dumbbell + max\_roll\_dumbbell +

max\_picth\_dumbbell + max\_yaw\_dumbbell + min\_roll\_dumbbell +

min\_pitch\_dumbbell + min\_yaw\_dumbbell + amplitude\_roll\_dumbbell +

amplitude\_pitch\_dumbbell + amplitude\_yaw\_dumbbell + total\_accel\_dumbbell

+

var\_accel\_dumbbell + avg\_roll\_dumbbell + stddev\_roll\_dumbbell +

var\_roll\_dumbbell + avg\_pitch\_dumbbell + stddev\_pitch\_dumbbell +

var\_pitch\_dumbbell + avg\_yaw\_dumbbell + stddev\_yaw\_dumbbell +

var\_yaw\_dumbbell + gyros\_dumbbell\_x + gyros\_dumbbell\_y +

gyros\_dumbbell\_z + accel\_dumbbell\_x + accel\_dumbbell\_y +

accel\_dumbbell\_z + magnet\_dumbbell\_x + magnet\_dumbbell\_y +

magnet\_dumbbell\_z + roll\_forearm + pitch\_forearm + yaw\_forearm +

kurtosis\_roll\_forearm + kurtosis\_picth\_forearm + skewness\_roll\_forearm +

skewness\_pitch\_forearm + max\_roll\_forearm + max\_picth\_forearm +

max\_yaw\_forearm + min\_roll\_forearm + min\_pitch\_forearm +

amplitude\_roll\_forearm + amplitude\_yaw\_forearm + total\_accel\_forearm +

var\_accel\_forearm + avg\_roll\_forearm + stddev\_roll\_forearm +

var\_roll\_forearm + avg\_pitch\_forearm + stddev\_pitch\_forearm +

var\_pitch\_forearm + avg\_yaw\_forearm + stddev\_yaw\_forearm +

var\_yaw\_forearm + gyros\_forearm\_x + gyros\_forearm\_y + gyros\_forearm\_z +

accel\_forearm\_x + accel\_forearm\_y + accel\_forearm\_z + magnet\_forearm\_x +

magnet\_forearm\_y + magnet\_forearm\_z

Step: AIC=290

classe ~ user\_name + raw\_timestamp\_part\_1 + raw\_timestamp\_part\_2 +

cvtd\_timestamp + new\_window + num\_window + roll\_belt + pitch\_belt +

yaw\_belt + total\_accel\_belt + kurtosis\_roll\_belt + kurtosis\_picth\_belt +

kurtosis\_yaw\_belt + skewness\_roll\_belt + skewness\_roll\_belt.1 +

skewness\_yaw\_belt + max\_roll\_belt + max\_picth\_belt + max\_yaw\_belt +

min\_roll\_belt + min\_pitch\_belt + min\_yaw\_belt + amplitude\_roll\_belt +

amplitude\_pitch\_belt + amplitude\_yaw\_belt + var\_total\_accel\_belt +

avg\_roll\_belt + stddev\_roll\_belt + var\_roll\_belt + avg\_pitch\_belt +

stddev\_pitch\_belt + var\_pitch\_belt + avg\_yaw\_belt + stddev\_yaw\_belt +

var\_yaw\_belt + gyros\_belt\_x + gyros\_belt\_y + gyros\_belt\_z +

accel\_belt\_x + accel\_belt\_y + accel\_belt\_z + magnet\_belt\_x +

magnet\_belt\_y + magnet\_belt\_z + roll\_arm + pitch\_arm + yaw\_arm +

total\_accel\_arm + var\_accel\_arm + avg\_roll\_arm + stddev\_roll\_arm +

var\_roll\_arm + avg\_pitch\_arm + stddev\_pitch\_arm + var\_pitch\_arm +

avg\_yaw\_arm + stddev\_yaw\_arm + var\_yaw\_arm + gyros\_arm\_x +

gyros\_arm\_y + gyros\_arm\_z + accel\_arm\_x + accel\_arm\_y + accel\_arm\_z +

magnet\_arm\_x + magnet\_arm\_y + magnet\_arm\_z + kurtosis\_roll\_arm +

kurtosis\_picth\_arm + kurtosis\_yaw\_arm + skewness\_roll\_arm +

skewness\_pitch\_arm + skewness\_yaw\_arm + max\_roll\_arm + max\_picth\_arm +

max\_yaw\_arm + min\_roll\_arm + min\_pitch\_arm + min\_yaw\_arm +

amplitude\_roll\_arm + amplitude\_pitch\_arm + amplitude\_yaw\_arm +

roll\_dumbbell + pitch\_dumbbell + yaw\_dumbbell + kurtosis\_roll\_dumbbell +

kurtosis\_picth\_dumbbell + kurtosis\_yaw\_dumbbell + skewness\_roll\_dumbbell

+

skewness\_pitch\_dumbbell + skewness\_yaw\_dumbbell + max\_roll\_dumbbell +

max\_picth\_dumbbell + max\_yaw\_dumbbell + min\_roll\_dumbbell +

min\_pitch\_dumbbell + min\_yaw\_dumbbell + amplitude\_roll\_dumbbell +

amplitude\_pitch\_dumbbell + total\_accel\_dumbbell + var\_accel\_dumbbell +

avg\_roll\_dumbbell + stddev\_roll\_dumbbell + var\_roll\_dumbbell +

avg\_pitch\_dumbbell + stddev\_pitch\_dumbbell + var\_pitch\_dumbbell +

avg\_yaw\_dumbbell + stddev\_yaw\_dumbbell + var\_yaw\_dumbbell +

gyros\_dumbbell\_x + gyros\_dumbbell\_y + gyros\_dumbbell\_z +

accel\_dumbbell\_x + accel\_dumbbell\_y + accel\_dumbbell\_z +

magnet\_dumbbell\_x + magnet\_dumbbell\_y + magnet\_dumbbell\_z +

roll\_forearm + pitch\_forearm + yaw\_forearm + kurtosis\_roll\_forearm +

kurtosis\_picth\_forearm + skewness\_roll\_forearm + skewness\_pitch\_forearm +

max\_roll\_forearm + max\_picth\_forearm + max\_yaw\_forearm +

min\_roll\_forearm + min\_pitch\_forearm + amplitude\_roll\_forearm +

amplitude\_yaw\_forearm + total\_accel\_forearm + var\_accel\_forearm +

avg\_roll\_forearm + stddev\_roll\_forearm + var\_roll\_forearm +

avg\_pitch\_forearm + stddev\_pitch\_forearm + var\_pitch\_forearm +

avg\_yaw\_forearm + stddev\_yaw\_forearm + var\_yaw\_forearm +

gyros\_forearm\_x + gyros\_forearm\_y + gyros\_forearm\_z + accel\_forearm\_x +

accel\_forearm\_y + accel\_forearm\_z + magnet\_forearm\_x + magnet\_forearm\_y +

magnet\_forearm\_z

Step: AIC=290

classe ~ user\_name + raw\_timestamp\_part\_1 + raw\_timestamp\_part\_2 +

cvtd\_timestamp + new\_window + num\_window + roll\_belt + pitch\_belt +

yaw\_belt + total\_accel\_belt + kurtosis\_roll\_belt + kurtosis\_picth\_belt +

kurtosis\_yaw\_belt + skewness\_roll\_belt + skewness\_roll\_belt.1 +

skewness\_yaw\_belt + max\_roll\_belt + max\_picth\_belt + max\_yaw\_belt +

min\_roll\_belt + min\_pitch\_belt + min\_yaw\_belt + amplitude\_roll\_belt +

amplitude\_pitch\_belt + amplitude\_yaw\_belt + var\_total\_accel\_belt +

avg\_roll\_belt + stddev\_roll\_belt + var\_roll\_belt + avg\_pitch\_belt +

stddev\_pitch\_belt + var\_pitch\_belt + avg\_yaw\_belt + stddev\_yaw\_belt +

var\_yaw\_belt + gyros\_belt\_x + gyros\_belt\_y + gyros\_belt\_z +

accel\_belt\_x + accel\_belt\_y + accel\_belt\_z + magnet\_belt\_x +

magnet\_belt\_y + magnet\_belt\_z + roll\_arm + pitch\_arm + yaw\_arm +

total\_accel\_arm + var\_accel\_arm + avg\_roll\_arm + stddev\_roll\_arm +

var\_roll\_arm + avg\_pitch\_arm + stddev\_pitch\_arm + var\_pitch\_arm +

avg\_yaw\_arm + stddev\_yaw\_arm + var\_yaw\_arm + gyros\_arm\_x +

gyros\_arm\_y + gyros\_arm\_z + accel\_arm\_x + accel\_arm\_y + accel\_arm\_z +

magnet\_arm\_x + magnet\_arm\_y + magnet\_arm\_z + kurtosis\_roll\_arm +

kurtosis\_picth\_arm + kurtosis\_yaw\_arm + skewness\_roll\_arm +

skewness\_pitch\_arm + skewness\_yaw\_arm + max\_roll\_arm + max\_picth\_arm +

max\_yaw\_arm + min\_roll\_arm + min\_pitch\_arm + min\_yaw\_arm +

amplitude\_roll\_arm + amplitude\_pitch\_arm + amplitude\_yaw\_arm +

roll\_dumbbell + pitch\_dumbbell + yaw\_dumbbell + kurtosis\_roll\_dumbbell +

kurtosis\_picth\_dumbbell + kurtosis\_yaw\_dumbbell + skewness\_roll\_dumbbell

+

skewness\_pitch\_dumbbell + skewness\_yaw\_dumbbell + max\_roll\_dumbbell +

max\_picth\_dumbbell + max\_yaw\_dumbbell + min\_roll\_dumbbell +

min\_pitch\_dumbbell + amplitude\_roll\_dumbbell + amplitude\_pitch\_dumbbell +

total\_accel\_dumbbell + var\_accel\_dumbbell + avg\_roll\_dumbbell +

stddev\_roll\_dumbbell + var\_roll\_dumbbell + avg\_pitch\_dumbbell +

stddev\_pitch\_dumbbell + var\_pitch\_dumbbell + avg\_yaw\_dumbbell +

stddev\_yaw\_dumbbell + var\_yaw\_dumbbell + gyros\_dumbbell\_x +

gyros\_dumbbell\_y + gyros\_dumbbell\_z + accel\_dumbbell\_x +

accel\_dumbbell\_y + accel\_dumbbell\_z + magnet\_dumbbell\_x +

magnet\_dumbbell\_y + magnet\_dumbbell\_z + roll\_forearm + pitch\_forearm +

yaw\_forearm + kurtosis\_roll\_forearm + kurtosis\_picth\_forearm +

skewness\_roll\_forearm + skewness\_pitch\_forearm + max\_roll\_forearm +

max\_picth\_forearm + max\_yaw\_forearm + min\_roll\_forearm +

min\_pitch\_forearm + amplitude\_roll\_forearm + amplitude\_yaw\_forearm +

total\_accel\_forearm + var\_accel\_forearm + avg\_roll\_forearm +

stddev\_roll\_forearm + var\_roll\_forearm + avg\_pitch\_forearm +

stddev\_pitch\_forearm + var\_pitch\_forearm + avg\_yaw\_forearm +

stddev\_yaw\_forearm + var\_yaw\_forearm + gyros\_forearm\_x +

gyros\_forearm\_y + gyros\_forearm\_z + accel\_forearm\_x + accel\_forearm\_y +

accel\_forearm\_z + magnet\_forearm\_x + magnet\_forearm\_y + magnet\_forearm\_z

Step: AIC=290

classe ~ user\_name + raw\_timestamp\_part\_1 + raw\_timestamp\_part\_2 +

cvtd\_timestamp + new\_window + num\_window + roll\_belt + pitch\_belt +

yaw\_belt + total\_accel\_belt + kurtosis\_roll\_belt + kurtosis\_picth\_belt +

kurtosis\_yaw\_belt + skewness\_roll\_belt + skewness\_roll\_belt.1 +

skewness\_yaw\_belt + max\_roll\_belt + max\_picth\_belt + max\_yaw\_belt +

min\_roll\_belt + min\_pitch\_belt + min\_yaw\_belt + amplitude\_roll\_belt +

amplitude\_pitch\_belt + amplitude\_yaw\_belt + var\_total\_accel\_belt +

avg\_roll\_belt + stddev\_roll\_belt + var\_roll\_belt + avg\_pitch\_belt +

stddev\_pitch\_belt + var\_pitch\_belt + avg\_yaw\_belt + stddev\_yaw\_belt +

var\_yaw\_belt + gyros\_belt\_x + gyros\_belt\_y + gyros\_belt\_z +

accel\_belt\_x + accel\_belt\_y + accel\_belt\_z + magnet\_belt\_x +

magnet\_belt\_y + magnet\_belt\_z + roll\_arm + pitch\_arm + yaw\_arm +

total\_accel\_arm + var\_accel\_arm + avg\_roll\_arm + stddev\_roll\_arm +

var\_roll\_arm + avg\_pitch\_arm + stddev\_pitch\_arm + var\_pitch\_arm +

avg\_yaw\_arm + stddev\_yaw\_arm + var\_yaw\_arm + gyros\_arm\_x +

gyros\_arm\_y + gyros\_arm\_z + accel\_arm\_x + accel\_arm\_y + accel\_arm\_z +

magnet\_arm\_x + magnet\_arm\_y + magnet\_arm\_z + kurtosis\_roll\_arm +

kurtosis\_picth\_arm + kurtosis\_yaw\_arm + skewness\_roll\_arm +

skewness\_pitch\_arm + skewness\_yaw\_arm + max\_roll\_arm + max\_picth\_arm +

max\_yaw\_arm + min\_roll\_arm + min\_pitch\_arm + min\_yaw\_arm +

amplitude\_roll\_arm + amplitude\_pitch\_arm + amplitude\_yaw\_arm +

roll\_dumbbell + pitch\_dumbbell + yaw\_dumbbell + kurtosis\_roll\_dumbbell +

kurtosis\_picth\_dumbbell + kurtosis\_yaw\_dumbbell + skewness\_roll\_dumbbell

+

skewness\_pitch\_dumbbell + max\_roll\_dumbbell + max\_picth\_dumbbell +

max\_yaw\_dumbbell + min\_roll\_dumbbell + min\_pitch\_dumbbell +

amplitude\_roll\_dumbbell + amplitude\_pitch\_dumbbell + total\_accel\_dumbbell

+

var\_accel\_dumbbell + avg\_roll\_dumbbell + stddev\_roll\_dumbbell +

var\_roll\_dumbbell + avg\_pitch\_dumbbell + stddev\_pitch\_dumbbell +

var\_pitch\_dumbbell + avg\_yaw\_dumbbell + stddev\_yaw\_dumbbell +

var\_yaw\_dumbbell + gyros\_dumbbell\_x + gyros\_dumbbell\_y +

gyros\_dumbbell\_z + accel\_dumbbell\_x + accel\_dumbbell\_y +

accel\_dumbbell\_z + magnet\_dumbbell\_x + magnet\_dumbbell\_y +

magnet\_dumbbell\_z + roll\_forearm + pitch\_forearm + yaw\_forearm +

kurtosis\_roll\_forearm + kurtosis\_picth\_forearm + skewness\_roll\_forearm +

skewness\_pitch\_forearm + max\_roll\_forearm + max\_picth\_forearm +

max\_yaw\_forearm + min\_roll\_forearm + min\_pitch\_forearm +

amplitude\_roll\_forearm + amplitude\_yaw\_forearm + total\_accel\_forearm +

var\_accel\_forearm + avg\_roll\_forearm + stddev\_roll\_forearm +

var\_roll\_forearm + avg\_pitch\_forearm + stddev\_pitch\_forearm +

var\_pitch\_forearm + avg\_yaw\_forearm + stddev\_yaw\_forearm +

var\_yaw\_forearm + gyros\_forearm\_x + gyros\_forearm\_y + gyros\_forearm\_z +

accel\_forearm\_x + accel\_forearm\_y + accel\_forearm\_z + magnet\_forearm\_x +

magnet\_forearm\_y + magnet\_forearm\_z

Step: AIC=290

classe ~ user\_name + raw\_timestamp\_part\_1 + raw\_timestamp\_part\_2 +

cvtd\_timestamp + new\_window + num\_window + roll\_belt + pitch\_belt +

yaw\_belt + total\_accel\_belt + kurtosis\_roll\_belt + kurtosis\_picth\_belt +

kurtosis\_yaw\_belt + skewness\_roll\_belt + skewness\_roll\_belt.1 +

skewness\_yaw\_belt + max\_roll\_belt + max\_picth\_belt + max\_yaw\_belt +

min\_roll\_belt + min\_pitch\_belt + min\_yaw\_belt + amplitude\_roll\_belt +

amplitude\_pitch\_belt + amplitude\_yaw\_belt + var\_total\_accel\_belt +

avg\_roll\_belt + stddev\_roll\_belt + var\_roll\_belt + avg\_pitch\_belt +

stddev\_pitch\_belt + var\_pitch\_belt + avg\_yaw\_belt + stddev\_yaw\_belt +

var\_yaw\_belt + gyros\_belt\_x + gyros\_belt\_y + gyros\_belt\_z +

accel\_belt\_x + accel\_belt\_y + accel\_belt\_z + magnet\_belt\_x +

magnet\_belt\_y + magnet\_belt\_z + roll\_arm + pitch\_arm + yaw\_arm +

total\_accel\_arm + var\_accel\_arm + avg\_roll\_arm + stddev\_roll\_arm +

var\_roll\_arm + avg\_pitch\_arm + stddev\_pitch\_arm + var\_pitch\_arm +

avg\_yaw\_arm + stddev\_yaw\_arm + var\_yaw\_arm + gyros\_arm\_x +

gyros\_arm\_y + gyros\_arm\_z + accel\_arm\_x + accel\_arm\_y + accel\_arm\_z +

magnet\_arm\_x + magnet\_arm\_y + magnet\_arm\_z + kurtosis\_roll\_arm +

kurtosis\_picth\_arm + kurtosis\_yaw\_arm + skewness\_roll\_arm +

skewness\_pitch\_arm + skewness\_yaw\_arm + max\_roll\_arm + max\_picth\_arm +

max\_yaw\_arm + min\_roll\_arm + min\_pitch\_arm + min\_yaw\_arm +

amplitude\_roll\_arm + amplitude\_pitch\_arm + amplitude\_yaw\_arm +

roll\_dumbbell + pitch\_dumbbell + yaw\_dumbbell + kurtosis\_roll\_dumbbell +

kurtosis\_picth\_dumbbell + skewness\_roll\_dumbbell + skewness\_pitch\_dumbbel

l +

max\_roll\_dumbbell + max\_picth\_dumbbell + max\_yaw\_dumbbell +

min\_roll\_dumbbell + min\_pitch\_dumbbell + amplitude\_roll\_dumbbell +

amplitude\_pitch\_dumbbell + total\_accel\_dumbbell + var\_accel\_dumbbell +

avg\_roll\_dumbbell + stddev\_roll\_dumbbell + var\_roll\_dumbbell +

avg\_pitch\_dumbbell + stddev\_pitch\_dumbbell + var\_pitch\_dumbbell +

avg\_yaw\_dumbbell + stddev\_yaw\_dumbbell + var\_yaw\_dumbbell +

gyros\_dumbbell\_x + gyros\_dumbbell\_y + gyros\_dumbbell\_z +

accel\_dumbbell\_x + accel\_dumbbell\_y + accel\_dumbbell\_z +

magnet\_dumbbell\_x + magnet\_dumbbell\_y + magnet\_dumbbell\_z +

roll\_forearm + pitch\_forearm + yaw\_forearm + kurtosis\_roll\_forearm +

kurtosis\_picth\_forearm + skewness\_roll\_forearm + skewness\_pitch\_forearm +

max\_roll\_forearm + max\_picth\_forearm + max\_yaw\_forearm +

min\_roll\_forearm + min\_pitch\_forearm + amplitude\_roll\_forearm +

amplitude\_yaw\_forearm + total\_accel\_forearm + var\_accel\_forearm +

avg\_roll\_forearm + stddev\_roll\_forearm + var\_roll\_forearm +

avg\_pitch\_forearm + stddev\_pitch\_forearm + var\_pitch\_forearm +

avg\_yaw\_forearm + stddev\_yaw\_forearm + var\_yaw\_forearm +

gyros\_forearm\_x + gyros\_forearm\_y + gyros\_forearm\_z + accel\_forearm\_x +

accel\_forearm\_y + accel\_forearm\_z + magnet\_forearm\_x + magnet\_forearm\_y +

magnet\_forearm\_z

Step: AIC=290

classe ~ user\_name + raw\_timestamp\_part\_1 + raw\_timestamp\_part\_2 +

cvtd\_timestamp + new\_window + num\_window + roll\_belt + pitch\_belt +

yaw\_belt + total\_accel\_belt + kurtosis\_roll\_belt + kurtosis\_picth\_belt +

kurtosis\_yaw\_belt + skewness\_roll\_belt + skewness\_roll\_belt.1 +

skewness\_yaw\_belt + max\_roll\_belt + max\_picth\_belt + max\_yaw\_belt +

min\_roll\_belt + min\_pitch\_belt + min\_yaw\_belt + amplitude\_roll\_belt +

amplitude\_pitch\_belt + amplitude\_yaw\_belt + var\_total\_accel\_belt +

avg\_roll\_belt + stddev\_roll\_belt + var\_roll\_belt + avg\_pitch\_belt +

stddev\_pitch\_belt + var\_pitch\_belt + avg\_yaw\_belt + stddev\_yaw\_belt +

var\_yaw\_belt + gyros\_belt\_x + gyros\_belt\_y + gyros\_belt\_z +

accel\_belt\_x + accel\_belt\_y + accel\_belt\_z + magnet\_belt\_x +

magnet\_belt\_y + magnet\_belt\_z + roll\_arm + pitch\_arm + yaw\_arm +

total\_accel\_arm + var\_accel\_arm + avg\_roll\_arm + stddev\_roll\_arm +

var\_roll\_arm + avg\_pitch\_arm + stddev\_pitch\_arm + var\_pitch\_arm +

avg\_yaw\_arm + stddev\_yaw\_arm + var\_yaw\_arm + gyros\_arm\_x +

gyros\_arm\_y + gyros\_arm\_z + accel\_arm\_x + accel\_arm\_y + accel\_arm\_z +

magnet\_arm\_x + magnet\_arm\_y + magnet\_arm\_z + kurtosis\_roll\_arm +

kurtosis\_picth\_arm + kurtosis\_yaw\_arm + skewness\_roll\_arm +

skewness\_pitch\_arm + skewness\_yaw\_arm + max\_roll\_arm + max\_picth\_arm +

max\_yaw\_arm + min\_roll\_arm + min\_pitch\_arm + min\_yaw\_arm +

amplitude\_roll\_arm + amplitude\_pitch\_arm + roll\_dumbbell +

pitch\_dumbbell + yaw\_dumbbell + kurtosis\_roll\_dumbbell +

kurtosis\_picth\_dumbbell + skewness\_roll\_dumbbell + skewness\_pitch\_dumbbel

l +

max\_roll\_dumbbell + max\_picth\_dumbbell + max\_yaw\_dumbbell +

min\_roll\_dumbbell + min\_pitch\_dumbbell + amplitude\_roll\_dumbbell +

amplitude\_pitch\_dumbbell + total\_accel\_dumbbell + var\_accel\_dumbbell +

avg\_roll\_dumbbell + stddev\_roll\_dumbbell + var\_roll\_dumbbell +

avg\_pitch\_dumbbell + stddev\_pitch\_dumbbell + var\_pitch\_dumbbell +

avg\_yaw\_dumbbell + stddev\_yaw\_dumbbell + var\_yaw\_dumbbell +

gyros\_dumbbell\_x + gyros\_dumbbell\_y + gyros\_dumbbell\_z +

accel\_dumbbell\_x + accel\_dumbbell\_y + accel\_dumbbell\_z +

magnet\_dumbbell\_x + magnet\_dumbbell\_y + magnet\_dumbbell\_z +

roll\_forearm + pitch\_forearm + yaw\_forearm + kurtosis\_roll\_forearm +

kurtosis\_picth\_forearm + skewness\_roll\_forearm + skewness\_pitch\_forearm +

max\_roll\_forearm + max\_picth\_forearm + max\_yaw\_forearm +

min\_roll\_forearm + min\_pitch\_forearm + amplitude\_roll\_forearm +

amplitude\_yaw\_forearm + total\_accel\_forearm + var\_accel\_forearm +

avg\_roll\_forearm + stddev\_roll\_forearm + var\_roll\_forearm +

avg\_pitch\_forearm + stddev\_pitch\_forearm + var\_pitch\_forearm +

avg\_yaw\_forearm + stddev\_yaw\_forearm + var\_yaw\_forearm +

gyros\_forearm\_x + gyros\_forearm\_y + gyros\_forearm\_z + accel\_forearm\_x +

accel\_forearm\_y + accel\_forearm\_z + magnet\_forearm\_x + magnet\_forearm\_y +

magnet\_forearm\_z

Step: AIC=290

classe ~ user\_name + raw\_timestamp\_part\_1 + raw\_timestamp\_part\_2 +

cvtd\_timestamp + new\_window + num\_window + roll\_belt + pitch\_belt +

yaw\_belt + total\_accel\_belt + kurtosis\_roll\_belt + kurtosis\_picth\_belt +

kurtosis\_yaw\_belt + skewness\_roll\_belt + skewness\_roll\_belt.1 +

skewness\_yaw\_belt + max\_roll\_belt + max\_picth\_belt + max\_yaw\_belt +

min\_roll\_belt + min\_pitch\_belt + min\_yaw\_belt + amplitude\_roll\_belt +

amplitude\_pitch\_belt + var\_total\_accel\_belt + avg\_roll\_belt +

stddev\_roll\_belt + var\_roll\_belt + avg\_pitch\_belt + stddev\_pitch\_belt +

var\_pitch\_belt + avg\_yaw\_belt + stddev\_yaw\_belt + var\_yaw\_belt +

gyros\_belt\_x + gyros\_belt\_y + gyros\_belt\_z + accel\_belt\_x +

accel\_belt\_y + accel\_belt\_z + magnet\_belt\_x + magnet\_belt\_y +

magnet\_belt\_z + roll\_arm + pitch\_arm + yaw\_arm + total\_accel\_arm +

var\_accel\_arm + avg\_roll\_arm + stddev\_roll\_arm + var\_roll\_arm +

avg\_pitch\_arm + stddev\_pitch\_arm + var\_pitch\_arm + avg\_yaw\_arm +

stddev\_yaw\_arm + var\_yaw\_arm + gyros\_arm\_x + gyros\_arm\_y +

gyros\_arm\_z + accel\_arm\_x + accel\_arm\_y + accel\_arm\_z + magnet\_arm\_x +

magnet\_arm\_y + magnet\_arm\_z + kurtosis\_roll\_arm + kurtosis\_picth\_arm +

kurtosis\_yaw\_arm + skewness\_roll\_arm + skewness\_pitch\_arm +

skewness\_yaw\_arm + max\_roll\_arm + max\_picth\_arm + max\_yaw\_arm +

min\_roll\_arm + min\_pitch\_arm + min\_yaw\_arm + amplitude\_roll\_arm +

amplitude\_pitch\_arm + roll\_dumbbell + pitch\_dumbbell + yaw\_dumbbell +

kurtosis\_roll\_dumbbell + kurtosis\_picth\_dumbbell + skewness\_roll\_dumbbell

+

skewness\_pitch\_dumbbell + max\_roll\_dumbbell + max\_picth\_dumbbell +

max\_yaw\_dumbbell + min\_roll\_dumbbell + min\_pitch\_dumbbell +

amplitude\_roll\_dumbbell + amplitude\_pitch\_dumbbell + total\_accel\_dumbbell

+

var\_accel\_dumbbell + avg\_roll\_dumbbell + stddev\_roll\_dumbbell +

var\_roll\_dumbbell + avg\_pitch\_dumbbell + stddev\_pitch\_dumbbell +

var\_pitch\_dumbbell + avg\_yaw\_dumbbell + stddev\_yaw\_dumbbell +

var\_yaw\_dumbbell + gyros\_dumbbell\_x + gyros\_dumbbell\_y +

gyros\_dumbbell\_z + accel\_dumbbell\_x + accel\_dumbbell\_y +

accel\_dumbbell\_z + magnet\_dumbbell\_x + magnet\_dumbbell\_y +

magnet\_dumbbell\_z + roll\_forearm + pitch\_forearm + yaw\_forearm +

kurtosis\_roll\_forearm + kurtosis\_picth\_forearm + skewness\_roll\_forearm +

skewness\_pitch\_forearm + max\_roll\_forearm + max\_picth\_forearm +

max\_yaw\_forearm + min\_roll\_forearm + min\_pitch\_forearm +

amplitude\_roll\_forearm + amplitude\_yaw\_forearm + total\_accel\_forearm +

var\_accel\_forearm + avg\_roll\_forearm + stddev\_roll\_forearm +

var\_roll\_forearm + avg\_pitch\_forearm + stddev\_pitch\_forearm +

var\_pitch\_forearm + avg\_yaw\_forearm + stddev\_yaw\_forearm +

var\_yaw\_forearm + gyros\_forearm\_x + gyros\_forearm\_y + gyros\_forearm\_z +

accel\_forearm\_x + accel\_forearm\_y + accel\_forearm\_z + magnet\_forearm\_x +

magnet\_forearm\_y + magnet\_forearm\_z

Step: AIC=290

classe ~ user\_name + raw\_timestamp\_part\_1 + raw\_timestamp\_part\_2 +

cvtd\_timestamp + new\_window + num\_window + roll\_belt + pitch\_belt +

yaw\_belt + total\_accel\_belt + kurtosis\_roll\_belt + kurtosis\_picth\_belt +

kurtosis\_yaw\_belt + skewness\_roll\_belt + skewness\_roll\_belt.1 +

skewness\_yaw\_belt + max\_roll\_belt + max\_picth\_belt + max\_yaw\_belt +

min\_roll\_belt + min\_pitch\_belt + min\_yaw\_belt + amplitude\_roll\_belt +

var\_total\_accel\_belt + avg\_roll\_belt + stddev\_roll\_belt +

var\_roll\_belt + avg\_pitch\_belt + stddev\_pitch\_belt + var\_pitch\_belt +

avg\_yaw\_belt + stddev\_yaw\_belt + var\_yaw\_belt + gyros\_belt\_x +

gyros\_belt\_y + gyros\_belt\_z + accel\_belt\_x + accel\_belt\_y +

accel\_belt\_z + magnet\_belt\_x + magnet\_belt\_y + magnet\_belt\_z +

roll\_arm + pitch\_arm + yaw\_arm + total\_accel\_arm + var\_accel\_arm +

avg\_roll\_arm + stddev\_roll\_arm + var\_roll\_arm + avg\_pitch\_arm +

stddev\_pitch\_arm + var\_pitch\_arm + avg\_yaw\_arm + stddev\_yaw\_arm +

var\_yaw\_arm + gyros\_arm\_x + gyros\_arm\_y + gyros\_arm\_z + accel\_arm\_x +

accel\_arm\_y + accel\_arm\_z + magnet\_arm\_x + magnet\_arm\_y +

magnet\_arm\_z + kurtosis\_roll\_arm + kurtosis\_picth\_arm + kurtosis\_yaw\_arm

+

skewness\_roll\_arm + skewness\_pitch\_arm + skewness\_yaw\_arm +

max\_roll\_arm + max\_picth\_arm + max\_yaw\_arm + min\_roll\_arm +

min\_pitch\_arm + min\_yaw\_arm + amplitude\_roll\_arm + amplitude\_pitch\_arm +

roll\_dumbbell + pitch\_dumbbell + yaw\_dumbbell + kurtosis\_roll\_dumbbell +

kurtosis\_picth\_dumbbell + skewness\_roll\_dumbbell + skewness\_pitch\_dumbbel

l +

max\_roll\_dumbbell + max\_picth\_dumbbell + max\_yaw\_dumbbell +

min\_roll\_dumbbell + min\_pitch\_dumbbell + amplitude\_roll\_dumbbell +

amplitude\_pitch\_dumbbell + total\_accel\_dumbbell + var\_accel\_dumbbell +

avg\_roll\_dumbbell + stddev\_roll\_dumbbell + var\_roll\_dumbbell +

avg\_pitch\_dumbbell + stddev\_pitch\_dumbbell + var\_pitch\_dumbbell +

avg\_yaw\_dumbbell + stddev\_yaw\_dumbbell + var\_yaw\_dumbbell +

gyros\_dumbbell\_x + gyros\_dumbbell\_y + gyros\_dumbbell\_z +

accel\_dumbbell\_x + accel\_dumbbell\_y + accel\_dumbbell\_z +

magnet\_dumbbell\_x + magnet\_dumbbell\_y + magnet\_dumbbell\_z +

roll\_forearm + pitch\_forearm + yaw\_forearm + kurtosis\_roll\_forearm +

kurtosis\_picth\_forearm + skewness\_roll\_forearm + skewness\_pitch\_forearm +

max\_roll\_forearm + max\_picth\_forearm + max\_yaw\_forearm +

min\_roll\_forearm + min\_pitch\_forearm + amplitude\_roll\_forearm +

amplitude\_yaw\_forearm + total\_accel\_forearm + var\_accel\_forearm +

avg\_roll\_forearm + stddev\_roll\_forearm + var\_roll\_forearm +

avg\_pitch\_forearm + stddev\_pitch\_forearm + var\_pitch\_forearm +

avg\_yaw\_forearm + stddev\_yaw\_forearm + var\_yaw\_forearm +

gyros\_forearm\_x + gyros\_forearm\_y + gyros\_forearm\_z + accel\_forearm\_x +

accel\_forearm\_y + accel\_forearm\_z + magnet\_forearm\_x + magnet\_forearm\_y +

magnet\_forearm\_z

Step: AIC=290

classe ~ user\_name + raw\_timestamp\_part\_1 + raw\_timestamp\_part\_2 +

cvtd\_timestamp + new\_window + num\_window + roll\_belt + pitch\_belt +

yaw\_belt + total\_accel\_belt + kurtosis\_roll\_belt + kurtosis\_picth\_belt +

kurtosis\_yaw\_belt + skewness\_roll\_belt + skewness\_roll\_belt.1 +

skewness\_yaw\_belt + max\_roll\_belt + max\_picth\_belt + max\_yaw\_belt +

min\_roll\_belt + min\_pitch\_belt + amplitude\_roll\_belt + var\_total\_accel\_be

lt +

avg\_roll\_belt + stddev\_roll\_belt + var\_roll\_belt + avg\_pitch\_belt +

stddev\_pitch\_belt + var\_pitch\_belt + avg\_yaw\_belt + stddev\_yaw\_belt +

var\_yaw\_belt + gyros\_belt\_x + gyros\_belt\_y + gyros\_belt\_z +

accel\_belt\_x + accel\_belt\_y + accel\_belt\_z + magnet\_belt\_x +

magnet\_belt\_y + magnet\_belt\_z + roll\_arm + pitch\_arm + yaw\_arm +

total\_accel\_arm + var\_accel\_arm + avg\_roll\_arm + stddev\_roll\_arm +

var\_roll\_arm + avg\_pitch\_arm + stddev\_pitch\_arm + var\_pitch\_arm +

avg\_yaw\_arm + stddev\_yaw\_arm + var\_yaw\_arm + gyros\_arm\_x +

gyros\_arm\_y + gyros\_arm\_z + accel\_arm\_x + accel\_arm\_y + accel\_arm\_z +

magnet\_arm\_x + magnet\_arm\_y + magnet\_arm\_z + kurtosis\_roll\_arm +

kurtosis\_picth\_arm + kurtosis\_yaw\_arm + skewness\_roll\_arm +

skewness\_pitch\_arm + skewness\_yaw\_arm + max\_roll\_arm + max\_picth\_arm +

max\_yaw\_arm + min\_roll\_arm + min\_pitch\_arm + min\_yaw\_arm +

amplitude\_roll\_arm + amplitude\_pitch\_arm + roll\_dumbbell +

pitch\_dumbbell + yaw\_dumbbell + kurtosis\_roll\_dumbbell +

kurtosis\_picth\_dumbbell + skewness\_roll\_dumbbell + skewness\_pitch\_dumbbel

l +

max\_roll\_dumbbell + max\_picth\_dumbbell + max\_yaw\_dumbbell +

min\_roll\_dumbbell + min\_pitch\_dumbbell + amplitude\_roll\_dumbbell +

amplitude\_pitch\_dumbbell + total\_accel\_dumbbell + var\_accel\_dumbbell +

avg\_roll\_dumbbell + stddev\_roll\_dumbbell + var\_roll\_dumbbell +

avg\_pitch\_dumbbell + stddev\_pitch\_dumbbell + var\_pitch\_dumbbell +

avg\_yaw\_dumbbell + stddev\_yaw\_dumbbell + var\_yaw\_dumbbell +

gyros\_dumbbell\_x + gyros\_dumbbell\_y + gyros\_dumbbell\_z +

accel\_dumbbell\_x + accel\_dumbbell\_y + accel\_dumbbell\_z +

magnet\_dumbbell\_x + magnet\_dumbbell\_y + magnet\_dumbbell\_z +

roll\_forearm + pitch\_forearm + yaw\_forearm + kurtosis\_roll\_forearm +

kurtosis\_picth\_forearm + skewness\_roll\_forearm + skewness\_pitch\_forearm +

max\_roll\_forearm + max\_picth\_forearm + max\_yaw\_forearm +

min\_roll\_forearm + min\_pitch\_forearm + amplitude\_roll\_forearm +

amplitude\_yaw\_forearm + total\_accel\_forearm + var\_accel\_forearm +

avg\_roll\_forearm + stddev\_roll\_forearm + var\_roll\_forearm +

avg\_pitch\_forearm + stddev\_pitch\_forearm + var\_pitch\_forearm +

avg\_yaw\_forearm + stddev\_yaw\_forearm + var\_yaw\_forearm +

gyros\_forearm\_x + gyros\_forearm\_y + gyros\_forearm\_z + accel\_forearm\_x +

accel\_forearm\_y + accel\_forearm\_z + magnet\_forearm\_x + magnet\_forearm\_y +

magnet\_forearm\_z

- cvtd\_timestamp 1 3.4004e-07 288

- accel\_belt\_y 1 3.4021e-07 288

- accel\_dumbbell\_x 1 3.4092e-07 288

- raw\_timestamp\_part\_2 1 3.4122e-07 288

- accel\_forearm\_y 1 3.4157e-07 288

- magnet\_belt\_z 1 3.4178e-07 288

- accel\_forearm\_x 1 3.4188e-07 288

- pitch\_dumbbell 1 3.4196e-07 288

- gyros\_forearm\_y 1 3.4250e-07 288

- gyros\_belt\_y 1 3.4270e-07 288

- raw\_timestamp\_part\_1 1 3.4273e-07 288

- pitch\_forearm 1 3.4273e-07 288

- roll\_dumbbell 1 3.4287e-07 288

- accel\_forearm\_z 1 3.4324e-07 288

- accel\_arm\_x 1 3.4466e-07 288

- gyros\_forearm\_z 1 3.4786e-07 288

- accel\_arm\_z 1 3.5030e-07 288

- magnet\_forearm\_x 1 3.5500e-07 288

- magnet\_forearm\_z 1 3.6029e-07 288

- magnet\_arm\_y 1 3.6940e-07 288

- accel\_arm\_y 1 3.7901e-07 288

- pitch\_arm 1 4.1144e-07 288

- num\_window 1 5.9629e-07 288

- pitch\_belt 1 1.0195e-06 288

<none> 3.3492e-07 290

Step: AIC=288

classe ~ user\_name + raw\_timestamp\_part\_1 + raw\_timestamp\_part\_2 +

cvtd\_timestamp + new\_window + num\_window + roll\_belt + pitch\_belt +

total\_accel\_belt + kurtosis\_roll\_belt + kurtosis\_picth\_belt +

skewness\_roll\_belt + skewness\_roll\_belt.1 + max\_roll\_belt +

max\_picth\_belt + max\_yaw\_belt + min\_roll\_belt + min\_pitch\_belt +

amplitude\_roll\_belt + var\_total\_accel\_belt + avg\_roll\_belt +

stddev\_roll\_belt + var\_roll\_belt + avg\_pitch\_belt + stddev\_pitch\_belt +

var\_pitch\_belt + avg\_yaw\_belt + stddev\_yaw\_belt + var\_yaw\_belt +

gyros\_belt\_x + gyros\_belt\_y + gyros\_belt\_z + accel\_belt\_x +

accel\_belt\_y + accel\_belt\_z + magnet\_belt\_x + magnet\_belt\_y +

magnet\_belt\_z + roll\_arm + pitch\_arm + yaw\_arm + total\_accel\_arm +

var\_accel\_arm + avg\_roll\_arm + stddev\_roll\_arm + var\_roll\_arm +

avg\_pitch\_arm + stddev\_pitch\_arm + var\_pitch\_arm + avg\_yaw\_arm +

stddev\_yaw\_arm + var\_yaw\_arm + gyros\_arm\_x + gyros\_arm\_y +

gyros\_arm\_z + accel\_arm\_x + accel\_arm\_y + accel\_arm\_z + magnet\_arm\_x +

magnet\_arm\_y + magnet\_arm\_z + kurtosis\_roll\_arm + kurtosis\_picth\_arm +

kurtosis\_yaw\_arm + skewness\_roll\_arm + skewness\_pitch\_arm +

skewness\_yaw\_arm + max\_roll\_arm + max\_picth\_arm + max\_yaw\_arm +

min\_roll\_arm + min\_pitch\_arm + min\_yaw\_arm + amplitude\_roll\_arm +

amplitude\_pitch\_arm + roll\_dumbbell + pitch\_dumbbell + yaw\_dumbbell +

kurtosis\_roll\_dumbbell + kurtosis\_picth\_dumbbell + skewness\_roll\_dumbbell

+

skewness\_pitch\_dumbbell + max\_roll\_dumbbell + max\_picth\_dumbbell +

max\_yaw\_dumbbell + min\_roll\_dumbbell + min\_pitch\_dumbbell +

amplitude\_roll\_dumbbell + amplitude\_pitch\_dumbbell + total\_accel\_dumbbell

+

var\_accel\_dumbbell + avg\_roll\_dumbbell + stddev\_roll\_dumbbell +

var\_roll\_dumbbell + avg\_pitch\_dumbbell + stddev\_pitch\_dumbbell +

var\_pitch\_dumbbell + avg\_yaw\_dumbbell + stddev\_yaw\_dumbbell +

var\_yaw\_dumbbell + gyros\_dumbbell\_x + gyros\_dumbbell\_y +

gyros\_dumbbell\_z + accel\_dumbbell\_x + accel\_dumbbell\_y +

accel\_dumbbell\_z + magnet\_dumbbell\_x + magnet\_dumbbell\_y +

magnet\_dumbbell\_z + roll\_forearm + pitch\_forearm + yaw\_forearm +

kurtosis\_roll\_forearm + kurtosis\_picth\_forearm + skewness\_roll\_forearm +

skewness\_pitch\_forearm + max\_roll\_forearm + max\_picth\_forearm +

max\_yaw\_forearm + min\_roll\_forearm + min\_pitch\_forearm +

amplitude\_roll\_forearm + amplitude\_yaw\_forearm + total\_accel\_forearm +

var\_accel\_forearm + avg\_roll\_forearm + stddev\_roll\_forearm +

var\_roll\_forearm + avg\_pitch\_forearm + stddev\_pitch\_forearm +

var\_pitch\_forearm + avg\_yaw\_forearm + stddev\_yaw\_forearm +

var\_yaw\_forearm + gyros\_forearm\_x + gyros\_forearm\_y + gyros\_forearm\_z +

accel\_forearm\_x + accel\_forearm\_y + accel\_forearm\_z + magnet\_forearm\_x +

magnet\_forearm\_y + magnet\_forearm\_z

Df Deviance AIC

- roll\_forearm 1 3.3393e-07 286

- kurtosis\_picth\_arm 1 3.3418e-07 286

- var\_yaw\_dumbbell 1 3.3420e-07 286

- var\_roll\_dumbbell 1 3.3420e-07 286

- kurtosis\_roll\_dumbbell 1 3.3420e-07 286

- max\_yaw\_dumbbell 1 3.3420e-07 286

- stddev\_roll\_dumbbell 1 3.3420e-07 286

- stddev\_yaw\_dumbbell 1 3.3420e-07 286

- skewness\_roll\_forearm 1 3.3420e-07 286

- var\_pitch\_dumbbell 1 3.3421e-07 286

- var\_yaw\_arm 1 3.3421e-07 286

- avg\_roll\_belt 1 3.3421e-07 286

- avg\_roll\_dumbbell 1 3.3421e-07 286

- avg\_roll\_arm 1 3.3421e-07 286

- amplitude\_roll\_arm 1 3.3422e-07 286

- min\_roll\_arm 1 3.3422e-07 286

- max\_roll\_arm 1 3.3422e-07 286

- avg\_pitch\_forearm 1 3.3422e-07 286

- skewness\_roll\_arm 1 3.3422e-07 286

- var\_roll\_belt 1 3.3422e-07 286

- skewness\_pitch\_forearm 1 3.3423e-07 286

- stddev\_roll\_belt 1 3.3423e-07 286

- stddev\_pitch\_dumbbell 1 3.3423e-07 286

- skewness\_roll\_belt.1 1 3.3423e-07 286

- kurtosis\_roll\_forearm 1 3.3423e-07 286

- skewness\_pitch\_dumbbell 1 3.3424e-07 286

- min\_roll\_belt 1 3.3424e-07 286

- max\_yaw\_forearm 1 3.3424e-07 286

- max\_roll\_belt 1 3.3424e-07 286

- max\_picth\_belt 1 3.3424e-07 286

- kurtosis\_picth\_belt 1 3.3424e-07 286

- max\_picth\_arm 1 3.3424e-07 286

- avg\_yaw\_belt 1 3.3424e-07 286

- min\_pitch\_arm 1 3.3424e-07 286

- amplitude\_pitch\_arm 1 3.3424e-07 286

- avg\_pitch\_arm 1 3.3424e-07 286

- gyros\_dumbbell\_y 1 3.3424e-07 286

- var\_yaw\_belt 1 3.3424e-07 286

- kurtosis\_yaw\_arm 1 3.3425e-07 286

- max\_yaw\_belt 1 3.3425e-07 286

- kurtosis\_roll\_belt 1 3.3425e-07 286

- skewness\_yaw\_arm 1 3.3425e-07 286

- kurtosis\_picth\_dumbbell 1 3.3425e-07 286

- stddev\_pitch\_arm 1 3.3425e-07 286

- skewness\_pitch\_arm 1 3.3425e-07 286

- amplitude\_roll\_belt 1 3.3426e-07 286

- max\_picth\_forearm 1 3.3426e-07 286

- amplitude\_pitch\_dumbbell 1 3.3426e-07 286

- var\_roll\_arm 1 3.3426e-07 286

- min\_pitch\_dumbbell 1 3.3426e-07 286

- max\_picth\_dumbbell 1 3.3426e-07 286

- stddev\_yaw\_forearm 1 3.3426e-07 286

- avg\_pitch\_belt 1 3.3427e-07 286

- kurtosis\_picth\_forearm 1 3.3427e-07 286

- skewness\_roll\_dumbbell 1 3.3427e-07 286

- var\_total\_accel\_belt 1 3.3427e-07 286

- new\_window 1 3.3427e-07 286

- avg\_yaw\_forearm 1 3.3427e-07 286

- avg\_roll\_forearm 1 3.3427e-07 286

- stddev\_yaw\_arm 1 3.3428e-07 286

- var\_pitch\_arm 1 3.3428e-07 286

- var\_yaw\_forearm 1 3.3428e-07 286

- skewness\_roll\_belt 1 3.3428e-07 286

- stddev\_yaw\_belt 1 3.3428e-07 286

- avg\_yaw\_dumbbell 1 3.3428e-07 286

- stddev\_roll\_arm 1 3.3429e-07 286

- var\_accel\_forearm 1 3.3429e-07 286

- var\_accel\_dumbbell 1 3.3429e-07 286

- min\_pitch\_belt 1 3.3430e-07 286

- magnet\_dumbbell\_y 1 3.3430e-07 286

- stddev\_roll\_forearm 1 3.3430e-07 286

- var\_roll\_forearm 1 3.3431e-07 286

- avg\_pitch\_dumbbell 1 3.3431e-07 286

- amplitude\_roll\_dumbbell 1 3.3431e-07 286

- min\_roll\_dumbbell 1 3.3431e-07 286

- max\_roll\_dumbbell 1 3.3431e-07 286

- amplitude\_yaw\_forearm 1 3.3432e-07 286

- max\_yaw\_arm 1 3.3432e-07 286

- stddev\_pitch\_belt 1 3.3433e-07 286

- kurtosis\_roll\_arm 1 3.3433e-07 286

- var\_pitch\_belt 1 3.3434e-07 286

- avg\_yaw\_arm 1 3.3436e-07 286

- var\_accel\_arm 1 3.3436e-07 286

- min\_pitch\_forearm 1 3.3437e-07 286

- var\_pitch\_forearm 1 3.3438e-07 286

- magnet\_dumbbell\_z 1 3.3439e-07 286

- min\_yaw\_arm 1 3.3440e-07 286

- min\_roll\_forearm 1 3.3442e-07 286

- max\_roll\_forearm 1 3.3443e-07 286

- yaw\_arm 1 3.3443e-07 286

- amplitude\_roll\_forearm 1 3.3443e-07 286

- stddev\_pitch\_forearm 1 3.3444e-07 286

- gyros\_belt\_x 1 3.3456e-07 286

- accel\_belt\_z 1 3.3461e-07 286

- gyros\_dumbbell\_x 1 3.3509e-07 286

- magnet\_dumbbell\_x 1 3.3511e-07 286

- gyros\_forearm\_x 1 3.3533e-07 286

- yaw\_forearm 1 3.3547e-07 286

- accel\_belt\_x 1 3.3562e-07 286

- total\_accel\_arm 1 3.3582e-07 286

- magnet\_belt\_y 1 3.3606e-07 286

- gyros\_dumbbell\_z 1 3.3609e-07 286

- gyros\_arm\_y 1 3.3614e-07 286

- gyros\_belt\_z 1 3.3621e-07 286

- roll\_arm 1 3.3625e-07 286

- magnet\_forearm\_y 1 3.3636e-07 286

- yaw\_dumbbell 1 3.3649e-07 286

- gyros\_arm\_x 1 3.3658e-07 286

- accel\_dumbbell\_z 1 3.3697e-07 286

- total\_accel\_forearm 1 3.3718e-07 286

- accel\_dumbbell\_y 1 3.3734e-07 286

- magnet\_arm\_z 1 3.3734e-07 286

- magnet\_arm\_x 1 3.3763e-07 286

- user\_name 1 3.3774e-07 286

- gyros\_arm\_z 1 3.3788e-07 286

- magnet\_belt\_x 1 3.3798e-07 286

- roll\_belt 1 3.3844e-07 286

- total\_accel\_belt 1 3.3895e-07 286

- cvtd\_timestamp 1 3.3940e-07 286

- accel\_belt\_y 1 3.3987e-07 286

- pitch\_belt 1 3.3988e-07 286

- total\_accel\_dumbbell 1 3.4029e-07 286

- raw\_timestamp\_part\_2 1 3.4090e-07 286

- accel\_dumbbell\_x 1 3.4192e-07 286

- magnet\_belt\_z 1 3.4210e-07 286

- gyros\_belt\_y 1 3.4214e-07 286

- accel\_forearm\_x 1 3.4216e-07 286

- accel\_forearm\_y 1 3.4217e-07 286

- raw\_timestamp\_part\_1 1 3.4253e-07 286

- accel\_forearm\_z 1 3.4264e-07 286

- roll\_dumbbell 1 3.4268e-07 286

- pitch\_dumbbell 1 3.4269e-07 286

- pitch\_forearm 1 3.4316e-07 286

- gyros\_forearm\_y 1 3.4329e-07 286

- accel\_arm\_x 1 3.4429e-07 286

- gyros\_forearm\_z 1 3.4816e-07 286

- accel\_arm\_z 1 3.5009e-07 286

- magnet\_forearm\_x 1 3.5557e-07 286

- magnet\_forearm\_z 1 3.5892e-07 286

- magnet\_arm\_y 1 3.7165e-07 286

- accel\_arm\_y 1 3.8108e-07 286

- pitch\_arm 1 4.1084e-07 286

- num\_window 1 5.9675e-07 286

<none> 3.3424e-07 288

Step: AIC=286

classe ~ user\_name + raw\_timestamp\_part\_1 + raw\_timestamp\_part\_2 +

cvtd\_timestamp + new\_window + num\_window + roll\_belt + pitch\_belt +

total\_accel\_belt + kurtosis\_roll\_belt + kurtosis\_picth\_belt +

skewness\_roll\_belt + skewness\_roll\_belt.1 + max\_roll\_belt +

max\_picth\_belt + max\_yaw\_belt + min\_roll\_belt + min\_pitch\_belt +

amplitude\_roll\_belt + var\_total\_accel\_belt + avg\_roll\_belt +

stddev\_roll\_belt + var\_roll\_belt + avg\_pitch\_belt + stddev\_pitch\_belt +

var\_pitch\_belt + avg\_yaw\_belt + stddev\_yaw\_belt + var\_yaw\_belt +

gyros\_belt\_x + gyros\_belt\_y + gyros\_belt\_z + accel\_belt\_x +

accel\_belt\_y + accel\_belt\_z + magnet\_belt\_x + magnet\_belt\_y +

magnet\_belt\_z + roll\_arm + pitch\_arm + yaw\_arm + total\_accel\_arm +

var\_accel\_arm + avg\_roll\_arm + stddev\_roll\_arm + var\_roll\_arm +

avg\_pitch\_arm + stddev\_pitch\_arm + var\_pitch\_arm + avg\_yaw\_arm +

stddev\_yaw\_arm + var\_yaw\_arm + gyros\_arm\_x + gyros\_arm\_y +

gyros\_arm\_z + accel\_arm\_x + accel\_arm\_y + accel\_arm\_z + magnet\_arm\_x +

magnet\_arm\_y + magnet\_arm\_z + kurtosis\_roll\_arm + kurtosis\_picth\_arm +

kurtosis\_yaw\_arm + skewness\_roll\_arm + skewness\_pitch\_arm +

skewness\_yaw\_arm + max\_roll\_arm + max\_picth\_arm + max\_yaw\_arm +

min\_roll\_arm + min\_pitch\_arm + min\_yaw\_arm + amplitude\_roll\_arm +

amplitude\_pitch\_arm + roll\_dumbbell + pitch\_dumbbell + yaw\_dumbbell +

kurtosis\_roll\_dumbbell + kurtosis\_picth\_dumbbell + skewness\_roll\_dumbbell

+

skewness\_pitch\_dumbbell + max\_roll\_dumbbell + max\_picth\_dumbbell +

max\_yaw\_dumbbell + min\_roll\_dumbbell + min\_pitch\_dumbbell +

amplitude\_roll\_dumbbell + amplitude\_pitch\_dumbbell + total\_accel\_dumbbell

+

var\_accel\_dumbbell + avg\_roll\_dumbbell + stddev\_roll\_dumbbell +

var\_roll\_dumbbell + avg\_pitch\_dumbbell + stddev\_pitch\_dumbbell +

var\_pitch\_dumbbell + avg\_yaw\_dumbbell + stddev\_yaw\_dumbbell +

var\_yaw\_dumbbell + gyros\_dumbbell\_x + gyros\_dumbbell\_y +

gyros\_dumbbell\_z + accel\_dumbbell\_x + accel\_dumbbell\_y +

accel\_dumbbell\_z + magnet\_dumbbell\_x + magnet\_dumbbell\_y +

magnet\_dumbbell\_z + pitch\_forearm + yaw\_forearm + kurtosis\_roll\_forearm +

kurtosis\_picth\_forearm + skewness\_roll\_forearm + skewness\_pitch\_forearm +

max\_roll\_forearm + max\_picth\_forearm + max\_yaw\_forearm +

min\_roll\_forearm + min\_pitch\_forearm + amplitude\_roll\_forearm +

amplitude\_yaw\_forearm + total\_accel\_forearm + var\_accel\_forearm +

avg\_roll\_forearm + stddev\_roll\_forearm + var\_roll\_forearm +

avg\_pitch\_forearm + stddev\_pitch\_forearm + var\_pitch\_forearm +

avg\_yaw\_forearm + stddev\_yaw\_forearm + var\_yaw\_forearm +

gyros\_forearm\_x + gyros\_forearm\_y + gyros\_forearm\_z + accel\_forearm\_x +

accel\_forearm\_y + accel\_forearm\_z + magnet\_forearm\_x + magnet\_forearm\_y +

magnet\_forearm\_z

Df Deviance AIC

- kurtosis\_picth\_arm 1 3.3388e-07 284

- var\_yaw\_dumbbell 1 3.3388e-07 284

- avg\_roll\_dumbbell 1 3.3389e-07 284

- stddev\_yaw\_dumbbell 1 3.3390e-07 284

- max\_yaw\_dumbbell 1 3.3390e-07 284

- skewness\_pitch\_forearm 1 3.3390e-07 284

- kurtosis\_roll\_dumbbell 1 3.3390e-07 284

- var\_roll\_dumbbell 1 3.3391e-07 284

- skewness\_roll\_forearm 1 3.3391e-07 284

- var\_yaw\_arm 1 3.3391e-07 284

- stddev\_roll\_dumbbell 1 3.3391e-07 284

- avg\_roll\_arm 1 3.3392e-07 284

- var\_pitch\_dumbbell 1 3.3392e-07 284

- amplitude\_roll\_arm 1 3.3392e-07 284

- min\_roll\_arm 1 3.3392e-07 284

- max\_roll\_arm 1 3.3392e-07 284

- avg\_pitch\_forearm 1 3.3392e-07 284

- avg\_roll\_belt 1 3.3393e-07 284

- skewness\_roll\_arm 1 3.3393e-07 284

- magnet\_dumbbell\_y 1 3.3393e-07 284

- var\_roll\_belt 1 3.3393e-07 284

- stddev\_pitch\_dumbbell 1 3.3393e-07 284

- max\_picth\_arm 1 3.3393e-07 284

- min\_pitch\_arm 1 3.3393e-07 284

- amplitude\_pitch\_arm 1 3.3393e-07 284

- avg\_yaw\_belt 1 3.3393e-07 284

- max\_roll\_belt 1 3.3394e-07 284

- min\_roll\_belt 1 3.3394e-07 284

- var\_yaw\_belt 1 3.3394e-07 284

- stddev\_roll\_belt 1 3.3394e-07 284

- kurtosis\_roll\_forearm 1 3.3394e-07 284

- max\_yaw\_forearm 1 3.3394e-07 284

- max\_picth\_belt 1 3.3394e-07 284

- skewness\_roll\_belt.1 1 3.3394e-07 284

- skewness\_yaw\_arm 1 3.3394e-07 284

- kurtosis\_picth\_belt 1 3.3395e-07 284

- skewness\_pitch\_dumbbell 1 3.3395e-07 284

- avg\_pitch\_arm 1 3.3395e-07 284

- kurtosis\_picth\_dumbbell 1 3.3395e-07 284

- max\_picth\_forearm 1 3.3395e-07 284

- amplitude\_roll\_belt 1 3.3395e-07 284

- kurtosis\_yaw\_arm 1 3.3395e-07 284

- kurtosis\_picth\_forearm 1 3.3395e-07 284

- max\_yaw\_belt 1 3.3396e-07 284

- kurtosis\_roll\_belt 1 3.3396e-07 284

- stddev\_pitch\_arm 1 3.3396e-07 284

- amplitude\_pitch\_dumbbell 1 3.3396e-07 284

- stddev\_yaw\_forearm 1 3.3396e-07 284

- min\_pitch\_dumbbell 1 3.3396e-07 284

- var\_roll\_arm 1 3.3396e-07 284

- max\_picth\_dumbbell 1 3.3396e-07 284

- skewness\_pitch\_arm 1 3.3396e-07 284

- avg\_pitch\_belt 1 3.3397e-07 284

- stddev\_yaw\_arm 1 3.3397e-07 284

- var\_pitch\_arm 1 3.3397e-07 284

- new\_window 1 3.3397e-07 284

- var\_accel\_forearm 1 3.3397e-07 284

- skewness\_roll\_dumbbell 1 3.3397e-07 284

- avg\_yaw\_forearm 1 3.3397e-07 284

- var\_total\_accel\_belt 1 3.3398e-07 284

- var\_yaw\_forearm 1 3.3398e-07 284

- avg\_yaw\_dumbbell 1 3.3398e-07 284

- avg\_roll\_forearm 1 3.3398e-07 284

- skewness\_roll\_belt 1 3.3398e-07 284

- var\_accel\_dumbbell 1 3.3399e-07 284

- stddev\_roll\_arm 1 3.3399e-07 284

- stddev\_yaw\_belt 1 3.3399e-07 284

- stddev\_roll\_forearm 1 3.3399e-07 284

- min\_pitch\_belt 1 3.3400e-07 284

- var\_roll\_forearm 1 3.3400e-07 284

- gyros\_dumbbell\_y 1 3.3400e-07 284

- avg\_pitch\_dumbbell 1 3.3401e-07 284

- max\_yaw\_arm 1 3.3401e-07 284

- amplitude\_roll\_dumbbell 1 3.3401e-07 284

- min\_roll\_dumbbell 1 3.3401e-07 284

- max\_roll\_dumbbell 1 3.3401e-07 284

- amplitude\_yaw\_forearm 1 3.3401e-07 284

- stddev\_pitch\_belt 1 3.3403e-07 284

- kurtosis\_roll\_arm 1 3.3404e-07 284

- var\_pitch\_belt 1 3.3405e-07 284

- var\_accel\_arm 1 3.3406e-07 284

- avg\_yaw\_arm 1 3.3406e-07 284

- min\_pitch\_forearm 1 3.3407e-07 284

- var\_pitch\_forearm 1 3.3407e-07 284

- magnet\_dumbbell\_z 1 3.3408e-07 284

- min\_yaw\_arm 1 3.3408e-07 284

- gyros\_belt\_x 1 3.3411e-07 284

- min\_roll\_forearm 1 3.3412e-07 284

- max\_roll\_forearm 1 3.3412e-07 284

- amplitude\_roll\_forearm 1 3.3412e-07 284

- stddev\_pitch\_forearm 1 3.3413e-07 284

- yaw\_arm 1 3.3430e-07 284

- accel\_belt\_z 1 3.3441e-07 284

- gyros\_dumbbell\_x 1 3.3482e-07 284

- accel\_belt\_x 1 3.3524e-07 284

- magnet\_dumbbell\_x 1 3.3536e-07 284

- total\_accel\_arm 1 3.3539e-07 284

- gyros\_dumbbell\_z 1 3.3542e-07 284

- gyros\_belt\_z 1 3.3576e-07 284

- magnet\_belt\_y 1 3.3581e-07 284

- gyros\_forearm\_x 1 3.3585e-07 284

- magnet\_forearm\_y 1 3.3595e-07 284

- gyros\_arm\_x 1 3.3598e-07 284

- yaw\_forearm 1 3.3612e-07 284

- yaw\_dumbbell 1 3.3613e-07 284

- roll\_arm 1 3.3620e-07 284

- gyros\_arm\_y 1 3.3626e-07 284

- magnet\_arm\_z 1 3.3651e-07 284

- accel\_dumbbell\_z 1 3.3669e-07 284

- roll\_belt 1 3.3682e-07 284

- accel\_dumbbell\_y 1 3.3707e-07 284

- magnet\_arm\_x 1 3.3730e-07 284

- total\_accel\_forearm 1 3.3731e-07 284

- user\_name 1 3.3779e-07 284

- gyros\_arm\_z 1 3.3821e-07 284

- total\_accel\_belt 1 3.3882e-07 284

- magnet\_belt\_x 1 3.3895e-07 284

- pitch\_belt 1 3.3927e-07 284

- cvtd\_timestamp 1 3.3937e-07 284

- accel\_belt\_y 1 3.3955e-07 284

- total\_accel\_dumbbell 1 3.4013e-07 284

- gyros\_belt\_y 1 3.4196e-07 284

- roll\_dumbbell 1 3.4208e-07 284

- accel\_dumbbell\_x 1 3.4213e-07 284

- accel\_forearm\_x 1 3.4219e-07 284

- raw\_timestamp\_part\_2 1 3.4238e-07 284

- raw\_timestamp\_part\_1 1 3.4245e-07 284

- accel\_forearm\_y 1 3.4264e-07 284

- magnet\_belt\_z 1 3.4299e-07 284

- pitch\_dumbbell 1 3.4299e-07 284

- gyros\_forearm\_y 1 3.4304e-07 284

- pitch\_forearm 1 3.4345e-07 284

- accel\_forearm\_z 1 3.4411e-07 284

- accel\_arm\_x 1 3.4426e-07 284

- gyros\_forearm\_z 1 3.4803e-07 284

- accel\_arm\_z 1 3.5000e-07 284

- magnet\_forearm\_x 1 3.5696e-07 284

- magnet\_forearm\_z 1 3.6194e-07 284

- magnet\_arm\_y 1 3.7411e-07 284

- accel\_arm\_y 1 3.8271e-07 284

- pitch\_arm 1 4.1200e-07 284

- num\_window 1 6.0541e-07 284

<none> 3.3393e-07 286

Step: AIC=284

classe ~ user\_name + raw\_timestamp\_part\_1 + raw\_timestamp\_part\_2 +

cvtd\_timestamp + new\_window + num\_window + roll\_belt + pitch\_belt +

total\_accel\_belt + kurtosis\_roll\_belt + kurtosis\_picth\_belt +

skewness\_roll\_belt + skewness\_roll\_belt.1 + max\_roll\_belt +

max\_picth\_belt + max\_yaw\_belt + min\_roll\_belt + min\_pitch\_belt +

amplitude\_roll\_belt + var\_total\_accel\_belt + avg\_roll\_belt +

stddev\_roll\_belt + var\_roll\_belt + avg\_pitch\_belt + stddev\_pitch\_belt +

var\_pitch\_belt + avg\_yaw\_belt + stddev\_yaw\_belt + var\_yaw\_belt +

gyros\_belt\_x + gyros\_belt\_y + gyros\_belt\_z + accel\_belt\_x +

accel\_belt\_y + accel\_belt\_z + magnet\_belt\_x + magnet\_belt\_y +

magnet\_belt\_z + roll\_arm + pitch\_arm + yaw\_arm + total\_accel\_arm +

var\_accel\_arm + avg\_roll\_arm + stddev\_roll\_arm + var\_roll\_arm +

avg\_pitch\_arm + stddev\_pitch\_arm + var\_pitch\_arm + avg\_yaw\_arm +

stddev\_yaw\_arm + var\_yaw\_arm + gyros\_arm\_x + gyros\_arm\_y +

gyros\_arm\_z + accel\_arm\_x + accel\_arm\_y + accel\_arm\_z + magnet\_arm\_x +

magnet\_arm\_y + magnet\_arm\_z + kurtosis\_roll\_arm + kurtosis\_yaw\_arm +

skewness\_roll\_arm + skewness\_pitch\_arm + skewness\_yaw\_arm +

max\_roll\_arm + max\_picth\_arm + max\_yaw\_arm + min\_roll\_arm +

min\_pitch\_arm + min\_yaw\_arm + amplitude\_roll\_arm + amplitude\_pitch\_arm +

roll\_dumbbell + pitch\_dumbbell + yaw\_dumbbell + kurtosis\_roll\_dumbbell +

kurtosis\_picth\_dumbbell + skewness\_roll\_dumbbell + skewness\_pitch\_dumbbel

l +

max\_roll\_dumbbell + max\_picth\_dumbbell + max\_yaw\_dumbbell +

min\_roll\_dumbbell + min\_pitch\_dumbbell + amplitude\_roll\_dumbbell +

amplitude\_pitch\_dumbbell + total\_accel\_dumbbell + var\_accel\_dumbbell +

avg\_roll\_dumbbell + stddev\_roll\_dumbbell + var\_roll\_dumbbell +

avg\_pitch\_dumbbell + stddev\_pitch\_dumbbell + var\_pitch\_dumbbell +

avg\_yaw\_dumbbell + stddev\_yaw\_dumbbell + var\_yaw\_dumbbell +

gyros\_dumbbell\_x + gyros\_dumbbell\_y + gyros\_dumbbell\_z +

accel\_dumbbell\_x + accel\_dumbbell\_y + accel\_dumbbell\_z +

magnet\_dumbbell\_x + magnet\_dumbbell\_y + magnet\_dumbbell\_z +

pitch\_forearm + yaw\_forearm + kurtosis\_roll\_forearm + kurtosis\_picth\_fore

arm +

skewness\_roll\_forearm + skewness\_pitch\_forearm + max\_roll\_forearm +

max\_picth\_forearm + max\_yaw\_forearm + min\_roll\_forearm +

min\_pitch\_forearm + amplitude\_roll\_forearm + amplitude\_yaw\_forearm +

total\_accel\_forearm + var\_accel\_forearm + avg\_roll\_forearm +

stddev\_roll\_forearm + var\_roll\_forearm + avg\_pitch\_forearm +

stddev\_pitch\_forearm + var\_pitch\_forearm + avg\_yaw\_forearm +

stddev\_yaw\_forearm + var\_yaw\_forearm + gyros\_forearm\_x +

gyros\_forearm\_y + gyros\_forearm\_z + accel\_forearm\_x + accel\_forearm\_y +

accel\_forearm\_z + magnet\_forearm\_x + magnet\_forearm\_y + magnet\_forearm\_z

Df Deviance AIC

- var\_yaw\_dumbbell 1 3.3384e-07 282

- var\_roll\_dumbbell 1 3.3385e-07 282

- avg\_roll\_dumbbell 1 3.3385e-07 282

- avg\_pitch\_forearm 1 3.3386e-07 282

- avg\_yaw\_belt 1 3.3387e-07 282

- var\_pitch\_dumbbell 1 3.3387e-07 282

- max\_picth\_arm 1 3.3387e-07 282

- min\_pitch\_arm 1 3.3387e-07 282

- amplitude\_pitch\_arm 1 3.3387e-07 282

- magnet\_dumbbell\_y 1 3.3387e-07 282

- stddev\_pitch\_dumbbell 1 3.3387e-07 282

- stddev\_roll\_dumbbell 1 3.3387e-07 282

- avg\_roll\_belt 1 3.3388e-07 282

- var\_yaw\_belt 1 3.3388e-07 282

- skewness\_pitch\_forearm 1 3.3388e-07 282

- max\_picth\_belt 1 3.3388e-07 282

- var\_yaw\_arm 1 3.3388e-07 282

- amplitude\_pitch\_dumbbell 1 3.3388e-07 282

- skewness\_roll\_arm 1 3.3389e-07 282

- min\_pitch\_dumbbell 1 3.3389e-07 282

- max\_picth\_dumbbell 1 3.3389e-07 282

- max\_picth\_forearm 1 3.3389e-07 282

- max\_roll\_belt 1 3.3389e-07 282

- min\_roll\_belt 1 3.3389e-07 282

- var\_roll\_belt 1 3.3389e-07 282

- kurtosis\_picth\_dumbbell 1 3.3389e-07 282

- max\_yaw\_dumbbell 1 3.3390e-07 282

- kurtosis\_roll\_dumbbell 1 3.3390e-07 282

- stddev\_yaw\_dumbbell 1 3.3390e-07 282

- skewness\_yaw\_arm 1 3.3390e-07 282

- skewness\_roll\_forearm 1 3.3390e-07 282

- max\_yaw\_belt 1 3.3390e-07 282

- kurtosis\_roll\_belt 1 3.3390e-07 282

- amplitude\_roll\_belt 1 3.3390e-07 282

- stddev\_yaw\_forearm 1 3.3390e-07 282

- var\_roll\_arm 1 3.3391e-07 282

- avg\_roll\_arm 1 3.3391e-07 282

- stddev\_roll\_belt 1 3.3391e-07 282

- kurtosis\_yaw\_arm 1 3.3391e-07 282

- avg\_pitch\_arm 1 3.3392e-07 282

- kurtosis\_roll\_forearm 1 3.3392e-07 282

- skewness\_pitch\_dumbbell 1 3.3392e-07 282

- stddev\_yaw\_arm 1 3.3392e-07 282

- max\_yaw\_forearm 1 3.3392e-07 282

- kurtosis\_picth\_forearm 1 3.3392e-07 282

- var\_accel\_dumbbell 1 3.3393e-07 282

- avg\_yaw\_forearm 1 3.3393e-07 282

- skewness\_roll\_belt.1 1 3.3393e-07 282

- stddev\_roll\_forearm 1 3.3394e-07 282

- stddev\_yaw\_belt 1 3.3394e-07 282

- avg\_roll\_forearm 1 3.3394e-07 282

- var\_roll\_forearm 1 3.3394e-07 282

- gyros\_dumbbell\_y 1 3.3394e-07 282

- var\_pitch\_arm 1 3.3394e-07 282

- stddev\_pitch\_arm 1 3.3395e-07 282

- kurtosis\_picth\_belt 1 3.3395e-07 282

- var\_yaw\_forearm 1 3.3396e-07 282

- amplitude\_roll\_dumbbell 1 3.3396e-07 282

- min\_roll\_dumbbell 1 3.3396e-07 282

- max\_roll\_dumbbell 1 3.3396e-07 282

- skewness\_roll\_belt 1 3.3396e-07 282

- skewness\_roll\_dumbbell 1 3.3397e-07 282

- max\_yaw\_arm 1 3.3397e-07 282

- avg\_pitch\_dumbbell 1 3.3397e-07 282

- amplitude\_yaw\_forearm 1 3.3397e-07 282

- min\_pitch\_belt 1 3.3397e-07 282

- avg\_yaw\_dumbbell 1 3.3397e-07 282

- new\_window 1 3.3399e-07 282

- skewness\_pitch\_arm 1 3.3399e-07 282

- avg\_pitch\_belt 1 3.3399e-07 282

- var\_pitch\_belt 1 3.3400e-07 282

- stddev\_pitch\_belt 1 3.3402e-07 282

- magnet\_dumbbell\_z 1 3.3402e-07 282

- min\_yaw\_arm 1 3.3403e-07 282

- avg\_yaw\_arm 1 3.3404e-07 282

- min\_pitch\_forearm 1 3.3404e-07 282

- var\_pitch\_forearm 1 3.3405e-07 282

- gyros\_belt\_x 1 3.3406e-07 282

- var\_accel\_arm 1 3.3407e-07 282

- stddev\_pitch\_forearm 1 3.3411e-07 282

- yaw\_arm 1 3.3425e-07 282

- var\_accel\_forearm 1 3.3428e-07 282

- accel\_belt\_z 1 3.3435e-07 282

- min\_roll\_forearm 1 3.3435e-07 282

- max\_roll\_forearm 1 3.3443e-07 282

- amplitude\_roll\_forearm 1 3.3470e-07 282

- gyros\_dumbbell\_x 1 3.3476e-07 282

- accel\_belt\_x 1 3.3518e-07 282

- magnet\_dumbbell\_x 1 3.3530e-07 282

- total\_accel\_arm 1 3.3533e-07 282

- gyros\_dumbbell\_z 1 3.3538e-07 282

- var\_total\_accel\_belt 1 3.3561e-07 282

- gyros\_belt\_z 1 3.3571e-07 282

- magnet\_belt\_y 1 3.3576e-07 282

- gyros\_forearm\_x 1 3.3582e-07 282

- magnet\_forearm\_y 1 3.3590e-07 282

- gyros\_arm\_x 1 3.3595e-07 282

- yaw\_forearm 1 3.3606e-07 282

- yaw\_dumbbell 1 3.3606e-07 282

- roll\_arm 1 3.3616e-07 282

- gyros\_arm\_y 1 3.3623e-07 282

- roll\_belt 1 3.3642e-07 282

- magnet\_arm\_z 1 3.3645e-07 282

- accel\_dumbbell\_z 1 3.3661e-07 282

- accel\_dumbbell\_y 1 3.3700e-07 282

- total\_accel\_forearm 1 3.3726e-07 282

- magnet\_arm\_x 1 3.3727e-07 282

- user\_name 1 3.3775e-07 282

- gyros\_arm\_z 1 3.3821e-07 282

- total\_accel\_belt 1 3.3876e-07 282

- magnet\_belt\_x 1 3.3890e-07 282

- pitch\_belt 1 3.3923e-07 282

- cvtd\_timestamp 1 3.3931e-07 282

- accel\_belt\_y 1 3.3949e-07 282

- total\_accel\_dumbbell 1 3.4009e-07 282

- kurtosis\_roll\_arm 1 3.4040e-07 282

- gyros\_belt\_y 1 3.4193e-07 282

- roll\_dumbbell 1 3.4200e-07 282

- accel\_dumbbell\_x 1 3.4209e-07 282

- accel\_forearm\_x 1 3.4215e-07 282

- raw\_timestamp\_part\_2 1 3.4233e-07 282

- raw\_timestamp\_part\_1 1 3.4244e-07 282

- accel\_forearm\_y 1 3.4256e-07 282

- magnet\_belt\_z 1 3.4289e-07 282

- pitch\_dumbbell 1 3.4293e-07 282

- gyros\_forearm\_y 1 3.4300e-07 282

- pitch\_forearm 1 3.4343e-07 282

- accel\_forearm\_z 1 3.4409e-07 282

- accel\_arm\_x 1 3.4420e-07 282

- gyros\_forearm\_z 1 3.4797e-07 282

- accel\_arm\_z 1 3.4996e-07 282

- magnet\_forearm\_x 1 3.5690e-07 282

- magnet\_forearm\_z 1 3.6191e-07 282

- amplitude\_roll\_arm 1 3.7097e-07 282

- magnet\_arm\_y 1 3.7403e-07 282

- accel\_arm\_y 1 3.8267e-07 282

- min\_roll\_arm 1 3.8518e-07 282

- pitch\_arm 1 4.1200e-07 282

- max\_roll\_arm 1 4.8987e-07 282

- num\_window 1 6.0541e-07 282

- stddev\_roll\_arm 1 6.7660e-07 282

<none> 3.3388e-07 284

Step: AIC=282

classe ~ user\_name + raw\_timestamp\_part\_1 + raw\_timestamp\_part\_2 +

cvtd\_timestamp + new\_window + num\_window + roll\_belt + pitch\_belt +

total\_accel\_belt + kurtosis\_roll\_belt + kurtosis\_picth\_belt +

skewness\_roll\_belt + skewness\_roll\_belt.1 + max\_roll\_belt +

max\_picth\_belt + max\_yaw\_belt + min\_roll\_belt + min\_pitch\_belt +

amplitude\_roll\_belt + var\_total\_accel\_belt + avg\_roll\_belt +

stddev\_roll\_belt + var\_roll\_belt + avg\_pitch\_belt + stddev\_pitch\_belt +

var\_pitch\_belt + avg\_yaw\_belt + stddev\_yaw\_belt + var\_yaw\_belt +

gyros\_belt\_x + gyros\_belt\_y + gyros\_belt\_z + accel\_belt\_x +

accel\_belt\_y + accel\_belt\_z + magnet\_belt\_x + magnet\_belt\_y +

magnet\_belt\_z + roll\_arm + pitch\_arm + yaw\_arm + total\_accel\_arm +

var\_accel\_arm + avg\_roll\_arm + stddev\_roll\_arm + var\_roll\_arm +

avg\_pitch\_arm + stddev\_pitch\_arm + var\_pitch\_arm + avg\_yaw\_arm +

stddev\_yaw\_arm + var\_yaw\_arm + gyros\_arm\_x + gyros\_arm\_y +

gyros\_arm\_z + accel\_arm\_x + accel\_arm\_y + accel\_arm\_z + magnet\_arm\_x +

magnet\_arm\_y + magnet\_arm\_z + kurtosis\_roll\_arm + kurtosis\_yaw\_arm +

skewness\_roll\_arm + skewness\_pitch\_arm + skewness\_yaw\_arm +

max\_roll\_arm + max\_picth\_arm + max\_yaw\_arm + min\_roll\_arm +

min\_pitch\_arm + min\_yaw\_arm + amplitude\_roll\_arm + amplitude\_pitch\_arm +

roll\_dumbbell + pitch\_dumbbell + yaw\_dumbbell + kurtosis\_roll\_dumbbell +

kurtosis\_picth\_dumbbell + skewness\_roll\_dumbbell + skewness\_pitch\_dumbbel

l +

max\_roll\_dumbbell + max\_picth\_dumbbell + max\_yaw\_dumbbell +

min\_roll\_dumbbell + min\_pitch\_dumbbell + amplitude\_roll\_dumbbell +

amplitude\_pitch\_dumbbell + total\_accel\_dumbbell + var\_accel\_dumbbell +

avg\_roll\_dumbbell + stddev\_roll\_dumbbell + var\_roll\_dumbbell +

avg\_pitch\_dumbbell + stddev\_pitch\_dumbbell + var\_pitch\_dumbbell +

avg\_yaw\_dumbbell + stddev\_yaw\_dumbbell + gyros\_dumbbell\_x +

gyros\_dumbbell\_y + gyros\_dumbbell\_z + accel\_dumbbell\_x +

accel\_dumbbell\_y + accel\_dumbbell\_z + magnet\_dumbbell\_x +

magnet\_dumbbell\_y + magnet\_dumbbell\_z + pitch\_forearm + yaw\_forearm +

kurtosis\_roll\_forearm + kurtosis\_picth\_forearm + skewness\_roll\_forearm +

skewness\_pitch\_forearm + max\_roll\_forearm + max\_picth\_forearm +

max\_yaw\_forearm + min\_roll\_forearm + min\_pitch\_forearm +

amplitude\_roll\_forearm + amplitude\_yaw\_forearm + total\_accel\_forearm +

var\_accel\_forearm + avg\_roll\_forearm + stddev\_roll\_forearm +

var\_roll\_forearm + avg\_pitch\_forearm + stddev\_pitch\_forearm +

var\_pitch\_forearm + avg\_yaw\_forearm + stddev\_yaw\_forearm +

var\_yaw\_forearm + gyros\_forearm\_x + gyros\_forearm\_y + gyros\_forearm\_z +

accel\_forearm\_x + accel\_forearm\_y + accel\_forearm\_z + magnet\_forearm\_x +

magnet\_forearm\_y + magnet\_forearm\_z

Df Deviance AIC

- avg\_yaw\_belt 1 0 280

- avg\_pitch\_forearm 1 0 280

- max\_picth\_arm 1 0 280

- min\_pitch\_arm 1 0 280

- amplitude\_pitch\_arm 1 0 280

- stddev\_pitch\_dumbbell 1 0 280

- var\_pitch\_dumbbell 1 0 280

- var\_roll\_dumbbell 1 0 280

- skewness\_pitch\_forearm 1 0 280

- avg\_roll\_belt 1 0 280

- var\_yaw\_belt 1 0 280

- max\_picth\_forearm 1 0 280

- magnet\_dumbbell\_y 1 0 280

- amplitude\_pitch\_dumbbell 1 0 280

- max\_roll\_belt 1 0 280

- min\_pitch\_dumbbell 1 0 280

- var\_yaw\_arm 1 0 280

- max\_picth\_dumbbell 1 0 280

- min\_roll\_belt 1 0 280

- kurtosis\_picth\_dumbbell 1 0 280

- max\_yaw\_dumbbell 1 0 280

- kurtosis\_roll\_dumbbell 1 0 280

- amplitude\_roll\_belt 1 0 280

- skewness\_yaw\_arm 1 0 280

- stddev\_yaw\_dumbbell 1 0 280

- skewness\_roll\_arm 1 0 280

- kurtosis\_yaw\_arm 1 0 280

- avg\_roll\_arm

1

0 280

- skewness\_roll\_forearm

1

0 280

- kurtosis\_picth\_forearm

1

0 280

- max\_picth\_belt

1

0 280

- max\_yaw\_forearm

1

0 280

- gyros\_dumbbell\_y

1

0 280

- var\_pitch\_arm

1

0 280

- stddev\_yaw\_arm

1

0 280

- skewness\_pitch\_dumbbell

1

0 280

- stddev\_yaw\_belt

1

0 280

- stddev\_roll\_forearm

1

0 280

- var\_roll\_arm

1

0 280

- stddev\_yaw\_forearm

1

0 280

- var\_roll\_forearm

1

0 280

- var\_accel\_forearm

1

0 280

- kurtosis\_roll\_forearm

1

0 280

- var\_yaw\_forearm

1

0 280

- stddev\_roll\_belt

1

0 280

- skewness\_roll\_belt

1

0 280

- max\_yaw\_arm

1

0 280

- avg\_pitch\_dumbbell

1

0 280

- avg\_yaw\_dumbbell

1

0 280

- stddev\_pitch\_ar

m

1

0 280

- amplitude\_yaw\_forearm

1

0 280

- min\_pitch\_belt

1

0 280

- var\_accel\_dumbbell

1

0 280

- var\_roll\_belt

1

0 280

- skewness\_roll\_dumbbell

1

0 280

- avg\_pitch\_arm

1

0 280

- amplitude\_roll\_arm

1

0 280

- avg\_roll\_forearm

1

0 280

- avg\_pitch\_belt

1

0 280

- max\_roll\_dumbbell

1

0 280

- new\_window

1

0 280

- min\_roll\_arm

1

0 280

- stddev\_roll\_arm

1

0 280

- min\_roll\_dumbbell

1

0 280

- stddev\_pitch\_belt

1

0 280

- amplitude\_roll\_dumbbell

1

0 280

- max\_roll\_arm

1

0 280

- var\_total\_accel\_belt

1

0 280

- magnet\_dumbbell\_z

1

0 280

- avg\_yaw\_forearm

1

0 280

- gyros\_belt\_x

1

0 280

- min\_pitch\_forearm

1

0 280

-

var\_pitch\_belt

1

0 280

- max\_roll\_forearm

1

0 280

- amplitude\_roll\_forearm

1

0 280

- min\_roll\_forearm

1

0 280

- avg\_yaw\_arm

1

0 280

- skewness\_pitch\_arm

1

0 280

- var\_accel\_arm

1

0 280

- kurtosis\_roll\_arm

1

0 280

- var\_pitch\_forearm

1

0 280

- stddev\_pitch\_forearm

1

0 280

- yaw\_arm

1

0 280

- accel\_belt\_z

1

0 280

- max\_yaw\_belt

1

0 280

- kurtosis\_roll\_belt

1

0 280

- gyros\_dumbbell\_x

1

0 280

- accel\_belt\_x

1

0 280

- total\_accel\_arm

1

0 280

- gyros\_dumbbell\_z

1

0 280

- gyros\_belt\_z

1

0 280

- magnet\_belt\_y

1

0 280

- gyros\_forearm\_x

1

0 280

- magnet\_forearm\_y

1

0 280

- gyros\_arm\_x

1

0 280

- yaw\_forearm

1

0 280

- yaw\_dumbbell

1

0 280

- gyros\_arm\_y

1

0 280

- roll\_arm

1

0 280

- magnet\_arm\_z

1

0 280

- roll\_belt

1

0 280

- accel\_dumbbell\_z

1

0 280

- accel\_dumbbell\_y

1

0 280

- magnet\_arm\_x

1

0 280

- user\_name

1

0 280

- gyros\_arm\_z

1

0 280

- total\_accel\_belt

1

0 280

- pitch\_belt

1

0 280

- cvtd\_timestamp

1

0 280

- accel\_belt\_y

1

0 280

- gyros\_belt\_y

1

0 280

- roll\_dumbbell

1

0 280

- accel\_forearm\_x

1

0 280

- raw\_timestamp\_part\_2

1

0 280

- raw\_timestamp\_part\_1

1

0 280

- magnet\_belt\_z

1

0 280

- gyros\_forearm\_y

1

0 280

- accel\_forearm\_z

1

0 280

- accel\_arm\_x

1

0 280

- gyros\_forearm\_z

1

0 280

- accel\_arm\_z

1

0 280

- magnet\_forearm\_z

1

0 280

- pitch\_forearm

1

0 280

-

magnet\_arm\_y

1

0 280

- accel\_arm\_y

1

0 280

- magnet\_forearm\_x

1

0 280

- pitch\_arm

1

0 280

- avg\_roll\_dumbbell

1

0 280

- total\_accel\_dumbbell

1

0 280

- magnet\_belt\_x

1

0 280

- num\_window

1

0 280

- accel\_forearm\_y

1

0 280

- min\_yaw\_arm

1

0 280

- pitch\_dumbbell

1

0 280

- skewness\_roll\_belt.1

1

0 280

- magnet\_dumbbell\_x

1

0 280

- stddev\_roll\_dumbbell

1

0 280

- total\_accel\_forearm

1

0 280

- accel\_dumbbell\_x

1

0 280

<none>

0 282

- kurtosis\_picth\_belt

1 38423 38703

Step: AIC=280

classe ~ user\_name + raw\_timestamp\_part\_1 + raw\_timestamp\_part\_2 +

cvtd\_timestamp + new\_window + num\_window + roll\_belt + pitch\_belt +

total\_accel\_belt + kurtosis\_roll\_belt + kurtosis\_picth\_belt +

skewness\_roll\_belt + skewness\_roll\_belt.1 + max\_roll\_belt +

max\_picth\_belt + max\_yaw\_belt + min\_roll\_belt + min\_pitch\_belt +

amplitude\_roll\_belt + var\_total\_accel\_belt + avg\_roll\_belt +

stddev\_roll\_belt + var\_roll\_belt + avg\_pitch\_belt + stddev\_pitch\_belt +

var\_pitch\_belt + stddev\_yaw\_belt + var\_yaw\_belt + gyros\_belt\_x +

gyros\_belt\_y + gyros\_belt\_z + accel\_belt\_x + accel\_belt\_y +

accel\_belt\_z + magnet\_belt\_x + magnet\_belt\_y + magnet\_belt\_z +

roll\_arm + pitch\_arm + yaw\_arm + total\_accel\_arm + var\_accel\_arm +

avg\_roll\_arm + stddev\_roll\_arm + var\_roll\_arm + avg\_pitch\_arm +

stddev\_pitch\_arm + var\_pitch\_arm + avg\_yaw\_arm + stddev\_yaw\_arm +

var\_yaw\_arm + gyros\_arm\_x + gyros\_arm\_y + gyros\_arm\_z + accel\_arm\_x +

accel\_arm\_y + accel\_arm\_z + magnet\_arm\_x + magnet\_arm\_y +

magnet\_arm\_z + kurtosis\_roll\_arm + kurtosis\_yaw\_arm + skewness\_roll\_arm +

skewness\_pitch\_arm + skewness\_yaw\_arm + max\_roll\_arm + max\_picth\_arm +

max\_yaw\_arm + min\_roll\_arm + min\_pitch\_arm + min\_yaw\_arm +

amplitude\_roll\_arm + amplitude\_pitch\_arm + roll\_dumbbell +

pitch\_dumbbell + yaw\_dumbbell + kurtosis\_roll\_dumbbell +

kurtosis\_picth\_dumbbell + skewness\_roll\_dumbbell + skewness\_pitch\_dumbbel

l +

max\_roll\_dumbbell + max\_picth\_dumbbell + max\_yaw\_dumbbell +

min\_roll\_dumbbell + min\_pitch\_dumbbell + amplitude\_roll\_dumbbell +

amplitude\_pitch\_dumbbell + total\_accel\_dumbbell + var\_accel\_dumbbell +

avg\_roll\_dumbbell + stddev\_roll\_dumbbell + var\_roll\_dumbbell +

avg\_pitch\_dumbbell + stddev\_pitch\_dumbbell + var\_pitch\_dumbbell +

avg\_yaw\_dumbbell + stddev\_yaw\_dumbbell + gyros\_dumbbell\_x +

gyros\_dumbbell\_y + gyros\_dumbbell\_z + accel\_dumbbell\_x +

accel\_dumbbell\_y + accel\_dumbbell\_z + magnet\_dumbbell\_x +

magnet\_dumbbell\_y + magnet\_dumbbell\_z + pitch\_forearm + yaw\_forearm +

kurtosis\_roll\_forearm + kurtosis\_picth\_forearm + skewness\_roll\_forearm +

skewness\_pitch\_forearm + max\_roll\_forearm + max\_picth\_forearm +

max\_yaw\_forearm + min\_roll\_forearm + min\_pitch\_forearm +

amplitude\_roll\_forearm + amplitude\_yaw\_forearm + total\_accel\_forearm +

var\_accel\_forearm + avg\_roll\_forearm + stddev\_roll\_forearm +

var\_roll\_forearm + avg\_pitch\_forearm + stddev\_pitch\_forearm +

var\_pitch\_forearm + avg\_yaw\_forearm + stddev\_yaw\_forearm +

var\_yaw\_forearm + gyros\_forearm\_x + gyros\_forearm\_y + gyros\_forearm\_z +

accel\_forearm\_x + accel\_forearm\_y + accel\_forearm\_z + magnet\_forearm\_x +

magnet\_forearm\_y + magnet\_forearm\_z

Df Deviance AIC

- avg\_roll\_dumbbell 1 3.3380e-07 278

- max\_picth\_arm 1 3.3380e-07 278

- min\_pitch\_arm 1 3.3380e-07 278

- amplitude\_pitch\_arm 1 3.3380e-07 278

- avg\_pitch\_forearm 1 3.3380e-07 278

- stddev\_pitch\_dumbbell 1 3.3380e-07 278

- skewness\_pitch\_forearm 1 3.3380e-07 278

- var\_pitch\_dumbbell 1 3.3380e-07 278

- var\_roll\_dumbbell 1 3.3380e-07 278

- magnet\_dumbbell\_y 1 3.3380e-07 278

- var\_yaw\_belt 1 3.3380e-07 278

- max\_picth\_forearm 1 3.3390e-07 278

- amplitude\_pitch\_dumbbell 1 3.3390e-07 278

- min\_pitch\_dumbbell 1 3.3390e-07 278

- max\_picth\_dumbbell 1 3.3390e-07 278

- avg\_roll\_belt 1 3.3390e-07 278

- min\_roll\_belt 1 3.3390e-07 278

- max\_roll\_belt 1 3.3390e-07 278

- var\_yaw\_arm 1 3.3390e-07 278

- kurtosis\_picth\_dumbbell 1 3.3390e-07 278

- max\_yaw\_dumbbell 1 3.3390e-07 278

- kurtosis\_roll\_dumbbell 1 3.3390e-07 278

- skewness\_yaw\_arm 1 3.3390e-07 278

- amplitude\_roll\_belt 1 3.3390e-07 278

- stddev\_roll\_dumbbell 1 3.3390e-07 278

- avg\_roll\_arm 1 3.3390e-07 278

- stddev\_yaw\_forearm 1 3.3390e-07 278

- kurtosis\_yaw\_arm 1 3.3390e-07 278

- skewness\_roll\_arm 1 3.3390e-07 278

- skewness\_roll\_forearm 1 3.3390e-07 278

- gyros\_dumbbell\_y 1 3.3390e-07 278

- kurtosis\_roll\_forearm 1 3.3390e-07 278

- max\_picth\_belt 1 3.3390e-07 278

- max\_yaw\_forearm 1 3.3390e-07 278

- var\_accel\_forearm 1 3.3390e-07 278

- stddev\_roll\_forearm 1 3.3390e-07 278

- kurtosis\_picth\_forearm 1 3.3390e-07 278

- skewness\_roll\_belt.1 1 3.3390e-07 278

- var\_roll\_forearm 1 3.3390e-07 278

- amplitude\_roll\_arm 1 3.3390e-07 278

- min\_roll\_arm 1 3.3390e-07 278

- skewness\_pitch\_dumbbell 1 3.3390e-07 278

- max\_roll\_arm 1 3.3390e-07 278

- stddev\_yaw\_arm 1 3.3390e-07 278

- max\_yaw\_belt 1 3.3390e-07 278

- kurtosis\_roll\_belt 1 3.3390e-07 278

- var\_yaw\_forearm 1 3.3390e-07 278

- stddev\_roll\_belt 1 3.3390e-07 278

- max\_yaw\_arm 1 3.3390e-07 278

- skewness\_pitch\_arm 1 3.3390e-07 278

- var\_pitch\_arm 1 3.3390e-07 278

- stddev\_pitch\_arm 1 3.3390e-07 278

- avg\_pitch\_arm 1 3.3390e-07 278

- skewness\_roll\_dumbbell 1 3.3390e-07 278

- var\_accel\_dumbbell 1 3.3390e-07 278

- var\_roll\_arm 1 3.3400e-07 278

- avg\_yaw\_forearm 1 3.3400e-07 278

- avg\_pitch\_dumbbell 1 3.3400e-07 278

- magnet\_dumbbell\_z 1 3.3400e-07 278

- skewness\_roll\_belt 1 3.3400e-07 278

- amplitude\_yaw\_forearm 1 3.3400e-07 278

- avg\_roll\_forearm 1 3.3400e-07 278

- min\_pitch\_belt 1 3.3400e-07 278

- stddev\_yaw\_dumbbell 1 3.3400e-07 278

- avg\_yaw\_dumbbell 1 3.3400e-07 278

- amplitude\_roll\_dumbbell 1 3.3400e-07 278

- min\_roll\_dumbbell 1 3.3400e-07 278

- max\_roll\_dumbbell 1 3.3400e-07 278

- stddev\_roll\_arm 1 3.3400e-07 278

- min\_yaw\_arm 1 3.3400e-07 278

- var\_total\_accel\_belt 1 3.3400e-07 278

- gyros\_belt\_x 1 3.3400e-07 278

- avg\_yaw\_arm 1 3.3400e-07 278

- kurtosis\_roll\_arm 1 3.3400e-07 278

- var\_pitch\_forearm 1 3.3410e-07 278

- min\_pitch\_forearm 1 3.3410e-07 278

- var\_accel\_arm 1 3.3410e-07 278

- var\_pitch\_belt 1 3.3410e-07 278

- stddev\_pitch\_forearm 1 3.3410e-07 278

- amplitude\_roll\_forearm 1 3.3410e-07 278

- avg\_pitch\_belt 1 3.3410e-07 278

- max\_roll\_forearm 1 3.3420e-07 278

- yaw\_arm 1 3.3420e-07 278

- new\_window 1 3.3430e-07 278

- accel\_belt\_z 1 3.3430e-07 278

- gyros\_dumbbell\_x 1 3.3480e-07 278

- accel\_belt\_x 1 3.3510e-07 278

- total\_accel\_arm 1 3.3530e-07 278

- magnet\_dumbbell\_x 1 3.3540e-07 278

- gyros\_dumbbell\_z 1 3.3540e-07 278

- gyros\_belt\_z 1 3.3570e-07 278

- magnet\_belt\_y 1 3.3570e-07 278

- magnet\_forearm\_y 1 3.3590e-07 278

- gyros\_arm\_x 1 3.3590e-07 278

- yaw\_forearm 1 3.3600e-07 278

- yaw\_dumbbell 1 3.3610e-07 278

- roll\_arm 1 3.3610e-07 278

- gyros\_arm\_y 1 3.3620e-07 278

- magnet\_arm\_z 1 3.3640e-07 278

- roll\_belt 1 3.3650e-07 278

- stddev\_pitch\_belt 1 3.3700e-07 278

- accel\_dumbbell\_z 1 3.3700e-07 278

- accel\_dumbbell\_y 1 3.3700e-07 278

- magnet\_arm\_x 1 3.3720e-07 278

- total\_accel\_forearm 1 3.3730e-07 278

- user\_name 1 3.3770e-07 278

- var\_roll\_belt 1 3.3820e-07 278

- gyros\_arm\_z 1 3.3820e-07 278

- total\_accel\_belt 1 3.3870e-07 278

- magnet\_belt\_x 1 3.3890e-07 278

- cvtd\_timestamp 1 3.3930e-07 278

- pitch\_belt 1 3.3930e-07 278

- accel\_belt\_y 1 3.3950e-07 278

- total\_accel\_dumbbell 1 3.4010e-07 278

- gyros\_belt\_y 1 3.4190e-07 278

- roll\_dumbbell 1 3.4200e-07 278

- accel\_dumbbell\_x 1 3.4220e-07 278

- accel\_forearm\_x 1 3.4220e-07 278

- raw\_timestamp\_part\_2 1 3.4230e-07 278

- raw\_timestamp\_part\_1 1 3.4240e-07 278

- accel\_forearm\_y 1 3.4270e-07 278

- pitch\_dumbbell 1 3.4300e-07 278

- magnet\_belt\_z 1 3.4300e-07 278

- gyros\_forearm\_y 1 3.4300e-07 278

- pitch\_forearm 1 3.4340e-07 278

- min\_roll\_forearm 1 3.4360e-07 278

- accel\_forearm\_z 1 3.4400e-07 278

- accel\_arm\_x 1 3.4430e-07 278

- gyros\_forearm\_z 1 3.4800e-07 278

- accel\_arm\_z 1 3.4990e-07 278

- magnet\_forearm\_x 1 3.5700e-07 278

- magnet\_forearm\_z 1 3.6190e-07 278

- magnet\_arm\_y 1 3.7420e-07 278

- accel\_arm\_y 1 3.8280e-07 278

- pitch\_arm 1 4.1200e-07 278

- stddev\_yaw\_belt 1 5.8870e-07 278

- num\_window 1 3.9678e-06 278

- gyros\_forearm\_x 1 1.3772e-05 278

- kurtosis\_picth\_belt 1 1.6521e-05 278

<none> 3.3380e-07 280

Step: AIC=278

classe ~ user\_name + raw\_timestamp\_part\_1 + raw\_timestamp\_part\_2 +

cvtd\_timestamp + new\_window + num\_window + roll\_belt + pitch\_belt +

total\_accel\_belt + kurtosis\_roll\_belt + kurtosis\_picth\_belt +

skewness\_roll\_belt + skewness\_roll\_belt.1 + max\_roll\_belt +

max\_picth\_belt + max\_yaw\_belt + min\_roll\_belt + min\_pitch\_belt +

amplitude\_roll\_belt + var\_total\_accel\_belt + avg\_roll\_belt +

stddev\_roll\_belt + var\_roll\_belt + avg\_pitch\_belt + stddev\_pitch\_belt +

var\_pitch\_belt + stddev\_yaw\_belt + var\_yaw\_belt + gyros\_belt\_x +

gyros\_belt\_y + gyros\_belt\_z + accel\_belt\_x + accel\_belt\_y +

accel\_belt\_z + magnet\_belt\_x + magnet\_belt\_y + magnet\_belt\_z +

roll\_arm + pitch\_arm + yaw\_arm + total\_accel\_arm + var\_accel\_arm +

avg\_roll\_arm + stddev\_roll\_arm + var\_roll\_arm + avg\_pitch\_arm +

stddev\_pitch\_arm + var\_pitch\_arm + avg\_yaw\_arm + stddev\_yaw\_arm +

var\_yaw\_arm + gyros\_arm\_x + gyros\_arm\_y + gyros\_arm\_z + accel\_arm\_x +

accel\_arm\_y + accel\_arm\_z + magnet\_arm\_x + magnet\_arm\_y +

magnet\_arm\_z + kurtosis\_roll\_arm + kurtosis\_yaw\_arm + skewness\_roll\_arm +

skewness\_pitch\_arm + skewness\_yaw\_arm + max\_roll\_arm + max\_picth\_arm +

max\_yaw\_arm + min\_roll\_arm + min\_pitch\_arm + min\_yaw\_arm +

amplitude\_roll\_arm + amplitude\_pitch\_arm + roll\_dumbbell +

pitch\_dumbbell + yaw\_dumbbell + kurtosis\_roll\_dumbbell +

kurtosis\_picth\_dumbbell + skewness\_roll\_dumbbell + skewness\_pitch\_dumbbel

l +

max\_roll\_dumbbell + max\_picth\_dumbbell + max\_yaw\_dumbbell +

min\_roll\_dumbbell + min\_pitch\_dumbbell + amplitude\_roll\_dumbbell +

amplitude\_pitch\_dumbbell + total\_accel\_dumbbell + var\_accel\_dumbbell +

stddev\_roll\_dumbbell + var\_roll\_dumbbell + avg\_pitch\_dumbbell +

stddev\_pitch\_dumbbell + var\_pitch\_dumbbell + avg\_yaw\_dumbbell +

stddev\_yaw\_dumbbell + gyros\_dumbbell\_x + gyros\_dumbbell\_y +

gyros\_dumbbell\_z + accel\_dumbbell\_x + accel\_dumbbell\_y +

accel\_dumbbell\_z + magnet\_dumbbell\_x + magnet\_dumbbell\_y +

magnet\_dumbbell\_z + pitch\_forearm + yaw\_forearm + kurtosis\_roll\_forearm +

kurtosis\_picth\_forearm + skewness\_roll\_forearm + skewness\_pitch\_forearm +

max\_roll\_forearm + max\_picth\_forearm + max\_yaw\_forearm +

min\_roll\_forearm + min\_pitch\_forearm + amplitude\_roll\_forearm +

amplitude\_yaw\_forearm + total\_accel\_forearm + var\_accel\_forearm +

avg\_roll\_forearm + stddev\_roll\_forearm + var\_roll\_forearm +

avg\_pitch\_forearm + stddev\_pitch\_forearm + var\_pitch\_forearm +

avg\_yaw\_forearm + stddev\_yaw\_forearm + var\_yaw\_forearm +

gyros\_forearm\_x + gyros\_forearm\_y + gyros\_forearm\_z + accel\_forearm\_x +

accel\_forearm\_y + accel\_forearm\_z + magnet\_forearm\_x + magnet\_forearm\_y +

magnet\_forearm\_z

Step: AIC=278

classe ~ user\_name + raw\_timestamp\_part\_1 + raw\_timestamp\_part\_2 +

cvtd\_timestamp + new\_window + num\_window + roll\_belt + pitch\_belt +

total\_accel\_belt + kurtosis\_roll\_belt + kurtosis\_picth\_belt +

skewness\_roll\_belt + skewness\_roll\_belt.1 + max\_roll\_belt +

max\_picth\_belt + max\_yaw\_belt + min\_roll\_belt + min\_pitch\_belt +

amplitude\_roll\_belt + var\_total\_accel\_belt + avg\_roll\_belt +

stddev\_roll\_belt + var\_roll\_belt + avg\_pitch\_belt + stddev\_pitch\_belt +

var\_pitch\_belt + stddev\_yaw\_belt + var\_yaw\_belt + gyros\_belt\_x +

gyros\_belt\_y + gyros\_belt\_z + accel\_belt\_x + accel\_belt\_y +

accel\_belt\_z + magnet\_belt\_x + magnet\_belt\_y + magnet\_belt\_z +

roll\_arm + pitch\_arm + yaw\_arm + total\_accel\_arm + var\_accel\_arm +

avg\_roll\_arm + stddev\_roll\_arm + var\_roll\_arm + avg\_pitch\_arm +

stddev\_pitch\_arm + var\_pitch\_arm + avg\_yaw\_arm + stddev\_yaw\_arm +

var\_yaw\_arm + gyros\_arm\_x + gyros\_arm\_y + gyros\_arm\_z + accel\_arm\_x +

accel\_arm\_y + accel\_arm\_z + magnet\_arm\_x + magnet\_arm\_y +

magnet\_arm\_z + kurtosis\_roll\_arm + kurtosis\_yaw\_arm + skewness\_roll\_arm +

skewness\_pitch\_arm + skewness\_yaw\_arm + max\_roll\_arm + max\_picth\_arm +

max\_yaw\_arm + min\_roll\_arm + min\_pitch\_arm + min\_yaw\_arm +

amplitude\_roll\_arm + amplitude\_pitch\_arm + roll\_dumbbell +

pitch\_dumbbell + yaw\_dumbbell + kurtosis\_roll\_dumbbell +

kurtosis\_picth\_dumbbell + skewness\_roll\_dumbbell + skewness\_pitch\_dumbbel

l +

max\_roll\_dumbbell + max\_picth\_dumbbell + max\_yaw\_dumbbell +

min\_roll\_dumbbell + min\_pitch\_dumbbell + amplitude\_roll\_dumbbell +

amplitude\_pitch\_dumbbell + total\_accel\_dumbbell + var\_accel\_dumbbell +

stddev\_roll\_dumbbell + var\_roll\_dumbbell + avg\_pitch\_dumbbell +

stddev\_pitch\_dumbbell + var\_pitch\_dumbbell + avg\_yaw\_dumbbell +

stddev\_yaw\_dumbbell + gyros\_dumbbell\_x + gyros\_dumbbell\_y +

gyros\_dumbbell\_z + accel\_dumbbell\_x + accel\_dumbbell\_y +

accel\_dumbbell\_z + magnet\_dumbbell\_x + magnet\_dumbbell\_y +

magnet\_dumbbell\_z + pitch\_forearm + yaw\_forearm + kurtosis\_roll\_forearm +

kurtosis\_picth\_forearm + skewness\_roll\_forearm + skewness\_pitch\_forearm +

max\_roll\_forearm + max\_picth\_forearm + max\_yaw\_forearm +

min\_roll\_forearm + min\_pitch\_forearm + amplitude\_roll\_forearm +

amplitude\_yaw\_forearm + total\_accel\_forearm + var\_accel\_forearm +

avg\_roll\_forearm + stddev\_roll\_forearm + var\_roll\_forearm +

avg\_pitch\_forearm + stddev\_pitch\_forearm + var\_pitch\_forearm +

avg\_yaw\_forearm + stddev\_yaw\_forearm + var\_yaw\_forearm +

gyros\_forearm\_x + gyros\_forearm\_y + gyros\_forearm\_z + accel\_forearm\_x +

accel\_forearm\_y + accel\_forearm\_z + magnet\_forearm\_x + magnet\_forearm\_y +

magnet\_forearm\_z

Df Deviance AIC

- amplitude\_pitch\_arm 1 3.3381e-07 276

- min\_pitch\_arm 1 3.3381e-07 276

- max\_picth\_arm 1 3.3381e-07 276

- stddev\_pitch\_dumbbell 1 3.3382e-07 276

- var\_pitch\_dumbbell 1 3.3382e-07 276

- var\_yaw\_belt 1 3.3383e-07 276

- skewness\_yaw\_arm 1 3.3383e-07 276

- max\_yaw\_dumbbell 1 3.3383e-07 276

- kurtosis\_roll\_dumbbell 1 3.3383e-07 276

- min\_roll\_belt 1 3.3383e-07 276

- avg\_roll\_belt 1 3.3384e-07 276

- max\_roll\_belt 1 3.3384e-07 276

- magnet\_dumbbell\_y 1 3.3384e-07 276

- var\_yaw\_arm 1 3.3384e-07 276

- kurtosis\_picth\_dumbbell 1 3.3384e-07 276

- skewness\_pitch\_forearm 1 3.3384e-07 276

- avg\_pitch\_forearm 1 3.3384e-07 276

- max\_picth\_forearm 1 3.3384e-07 276

- amplitude\_pitch\_dumbbell 1 3.3384e-07 276

- min\_pitch\_dumbbell 1 3.3385e-07 276

- max\_picth\_dumbbell 1 3.3385e-07 276

- amplitude\_roll\_belt 1 3.3385e-07 276

- var\_roll\_dumbbell 1 3.3385e-07 276

- avg\_roll\_arm 1 3.3385e-07 276

- stddev\_yaw\_dumbbell 1 3.3386e-07 276

- var\_roll\_belt 1 3.3386e-07 276

- skewness\_roll\_forearm 1 3.3387e-07 276

- amplitude\_roll\_arm 1 3.3387e-07 276

- min\_roll\_arm 1 3.3387e-07 276

- max\_roll\_arm 1 3.3387e-07 276

- stddev\_roll\_forearm 1 3.3387e-07 276

- stddev\_roll\_dumbbell 1 3.3389e-07 276

- kurtosis\_yaw\_arm 1 3.3389e-07 276

- kurtosis\_roll\_forearm 1 3.3389e-07 276

- var\_roll\_forearm 1 3.3389e-07 276

- kurtosis\_picth\_forearm 1 3.3389e-07 276

- max\_yaw\_forearm 1 3.3389e-07 276

- max\_picth\_belt 1 3.3390e-07 276

- stddev\_roll\_belt 1 3.3390e-07 276

- gyros\_dumbbell\_y 1 3.3390e-07 276

- skewness\_roll\_belt.1 1 3.3390e-07 276

- stddev\_yaw\_arm 1 3.3391e-07 276

- var\_pitch\_arm 1 3.3391e-07 276

- var\_yaw\_forearm 1 3.3392e-07 276

- stddev\_yaw\_forearm 1 3.3392e-07 276

- stddev\_yaw\_belt 1 3.3392e-07 276

- avg\_pitch\_arm 1 3.3392e-07 276

- var\_roll\_arm 1 3.3393e-07 276

- skewness\_roll\_dumbbell 1 3.3393e-07 276

- avg\_yaw\_forearm 1 3.3393e-07 276

- avg\_pitch\_dumbbell 1 3.3393e-07 276

- amplitude\_roll\_dumbbell 1 3.3394e-07 276

- min\_roll\_dumbbell 1 3.3394e-07 276

- max\_roll\_dumbbell 1 3.3394e-07 276

- avg\_pitch\_belt 1 3.3394e-07 276

- min\_pitch\_belt 1 3.3395e-07 276

- amplitude\_yaw\_forearm 1 3.3395e-07 276

- magnet\_dumbbell\_z 1 3.3396e-07 276

- stddev\_pitch\_arm 1 3.3396e-07 276

- avg\_yaw\_dumbbell 1 3.3397e-07 276

- skewness\_pitch\_arm 1 3.3397e-07 276

- new\_window 1 3.3397e-07 276

- stddev\_roll\_arm 1 3.3398e-07 276

- skewness\_roll\_belt 1 3.3398e-07 276

- var\_accel\_dumbbell 1 3.3398e-07 276

- gyros\_belt\_x 1 3.3400e-07 276

- var\_total\_accel\_belt 1 3.3400e-07 276

- amplitude\_roll\_forearm 1 3.3401e-07 276

- min\_pitch\_forearm 1 3.3402e-07 276

- max\_yaw\_belt 1 3.3405e-07 276

- kurtosis\_roll\_belt 1 3.3405e-07 276

- var\_pitch\_forearm 1 3.3405e-07 276

- max\_roll\_forearm 1 3.3406e-07 276

- min\_roll\_forearm 1 3.3406e-07 276

- kurtosis\_roll\_arm 1 3.3408e-07 276

- stddev\_pitch\_belt 1 3.3410e-07 276

- kurtosis\_picth\_belt 1 3.3412e-07 276

- var\_pitch\_belt 1 3.3413e-07 276

- skewness\_roll\_arm 1 3.3413e-07 276

- yaw\_arm 1 3.3417e-07 276

- var\_accel\_arm 1 3.3417e-07 276

- accel\_belt\_z 1 3.3428e-07 276

- gyros\_dumbbell\_x 1 3.3475e-07 276

- accel\_belt\_x 1 3.3516e-07 276

- total\_accel\_arm 1 3.3529e-07 276

- magnet\_dumbbell\_x 1 3.3536e-07 276

- gyros\_dumbbell\_z 1 3.3540e-07 276

- gyros\_belt\_z 1 3.3566e-07 276

- magnet\_belt\_y 1 3.3573e-07 276

- roll\_belt 1 3.3581e-07 276

- gyros\_forearm\_x 1 3.3586e-07 276

- magnet\_forearm\_y 1 3.3589e-07 276

- gyros\_arm\_x 1 3.3591e-07 276

- yaw\_forearm 1 3.3601e-07 276

- yaw\_dumbbell 1 3.3607e-07 276

- roll\_arm 1 3.3616e-07 276

- gyros\_arm\_y 1 3.3618e-07 276

- magnet\_arm\_z 1 3.3644e-07 276

- accel\_dumbbell\_z 1 3.3661e-07 276

- accel\_dumbbell\_y 1 3.3698e-07 276

- magnet\_arm\_x 1 3.3717e-07 276

- total\_accel\_forearm 1 3.3730e-07 276

- user\_name 1 3.3768e-07 276

- stddev\_pitch\_forearm 1 3.3801e-07 276

- gyros\_arm\_z 1 3.3818e-07 276

- total\_accel\_belt 1 3.3871e-07 276

- magnet\_belt\_x 1 3.3900e-07 276

- skewness\_pitch\_dumbbell 1 3.3917e-07 276

- cvtd\_timestamp 1 3.3924e-07 276

- accel\_belt\_y 1 3.3949e-07 276

- pitch\_belt 1 3.3961e-07 276

- total\_accel\_dumbbell 1 3.4017e-07 276

- gyros\_belt\_y 1 3.4187e-07 276

- roll\_dumbbell 1 3.4202e-07 276

- accel\_forearm\_x 1 3.4220e-07 276

- accel\_dumbbell\_x 1 3.4222e-07 276

- raw\_timestamp\_part\_2 1 3.4233e-07 276

- raw\_timestamp\_part\_1 1 3.4243e-07 276

- accel\_forearm\_y 1 3.4267e-07 276

- magnet\_belt\_z 1 3.4281e-07 276

- pitch\_dumbbell 1 3.4303e-07 276

- gyros\_forearm\_y 1 3.4307e-07 276

- pitch\_forearm 1 3.4342e-07 276

- accel\_forearm\_z 1 3.4401e-07 276

- accel\_arm\_x 1 3.4414e-07 276

- avg\_roll\_forearm 1 3.4443e-07 276

- gyros\_forearm\_z 1 3.4807e-07 276

- accel\_arm\_z 1 3.4997e-07 276

- magnet\_forearm\_x 1 3.5734e-07 276

- magnet\_forearm\_z 1 3.6189e-07 276

- magnet\_arm\_y 1 3.8022e-07 276

- accel\_arm\_y 1 3.8281e-07 276

- pitch\_arm 1 4.1212e-07 276

- num\_window 1 6.0656e-07 276

- avg\_yaw\_arm 1 8.5495e-07 276

- min\_yaw\_arm 1 8.7450e-07 276

- var\_accel\_forearm 1 1.4276e-06 276

- max\_yaw\_arm 1 1.8390e-06 276

<none> 3.3382e-07 278

Step: AIC=276

classe ~ user\_name + raw\_timestamp\_part\_1 + raw\_timestamp\_part\_2 +

cvtd\_timestamp + new\_window + num\_window + roll\_belt + pitch\_belt +

total\_accel\_belt + kurtosis\_roll\_belt + kurtosis\_picth\_belt +

skewness\_roll\_belt + skewness\_roll\_belt.1 + max\_roll\_belt +

max\_picth\_belt + max\_yaw\_belt + min\_roll\_belt + min\_pitch\_belt +

amplitude\_roll\_belt + var\_total\_accel\_belt + avg\_roll\_belt +

stddev\_roll\_belt + var\_roll\_belt + avg\_pitch\_belt + stddev\_pitch\_belt +

var\_pitch\_belt + stddev\_yaw\_belt + var\_yaw\_belt + gyros\_belt\_x +

gyros\_belt\_y + gyros\_belt\_z + accel\_belt\_x + accel\_belt\_y +

accel\_belt\_z + magnet\_belt\_x + magnet\_belt\_y + magnet\_belt\_z +

roll\_arm + pitch\_arm + yaw\_arm + total\_accel\_arm + var\_accel\_arm +

avg\_roll\_arm + stddev\_roll\_arm + var\_roll\_arm + avg\_pitch\_arm +

stddev\_pitch\_arm + var\_pitch\_arm + avg\_yaw\_arm + stddev\_yaw\_arm +

var\_yaw\_arm + gyros\_arm\_x + gyros\_arm\_y + gyros\_arm\_z + accel\_arm\_x +

accel\_arm\_y + accel\_arm\_z + magnet\_arm\_x + magnet\_arm\_y +

magnet\_arm\_z + kurtosis\_roll\_arm + kurtosis\_yaw\_arm + skewness\_roll\_arm +

skewness\_pitch\_arm + skewness\_yaw\_arm + max\_roll\_arm + max\_picth\_arm +

max\_yaw\_arm + min\_roll\_arm + min\_pitch\_arm + min\_yaw\_arm +

amplitude\_roll\_arm + roll\_dumbbell + pitch\_dumbbell + yaw\_dumbbell +

kurtosis\_roll\_dumbbell + kurtosis\_picth\_dumbbell + skewness\_roll\_dumbbell

+

skewness\_pitch\_dumbbell + max\_roll\_dumbbell + max\_picth\_dumbbell +

max\_yaw\_dumbbell + min\_roll\_dumbbell + min\_pitch\_dumbbell +

amplitude\_roll\_dumbbell + amplitude\_pitch\_dumbbell + total\_accel\_dumbbell

+

var\_accel\_dumbbell + stddev\_roll\_dumbbell + var\_roll\_dumbbell +

avg\_pitch\_dumbbell + stddev\_pitch\_dumbbell + var\_pitch\_dumbbell +

avg\_yaw\_dumbbell + stddev\_yaw\_dumbbell + gyros\_dumbbell\_x +

gyros\_dumbbell\_y + gyros\_dumbbell\_z + accel\_dumbbell\_x +

accel\_dumbbell\_y + accel\_dumbbell\_z + magnet\_dumbbell\_x +

magnet\_dumbbell\_y + magnet\_dumbbell\_z + pitch\_forearm + yaw\_forearm +

kurtosis\_roll\_forearm + kurtosis\_picth\_forearm + skewness\_roll\_forearm +

skewness\_pitch\_forearm + max\_roll\_forearm + max\_picth\_forearm +

max\_yaw\_forearm + min\_roll\_forearm + min\_pitch\_forearm +

amplitude\_roll\_forearm + amplitude\_yaw\_forearm + total\_accel\_forearm +

var\_accel\_forearm + avg\_roll\_forearm + stddev\_roll\_forearm +

var\_roll\_forearm + avg\_pitch\_forearm + stddev\_pitch\_forearm +

var\_pitch\_forearm + avg\_yaw\_forearm + stddev\_yaw\_forearm +

var\_yaw\_forearm + gyros\_forearm\_x + gyros\_forearm\_y + gyros\_forearm\_z +

accel\_forearm\_x + accel\_forearm\_y + accel\_forearm\_z + magnet\_forearm\_x +

magnet\_forearm\_y + magnet\_forearm\_z

Df Deviance AIC

- stddev\_pitch\_dumbbell 1 3.3400e-07 274

- min\_pitch\_arm 1 3.3400e-07 274

- var\_pitch\_dumbbell 1 3.3400e-07 274

- var\_yaw\_belt 1 3.3400e-07 274

- magnet\_dumbbell\_y 1 3.3400e-07 274

- max\_picth\_forearm 1 3.3400e-07 274

- avg\_pitch\_forearm 1 3.3400e-07 274

- max\_yaw\_dumbbell 1 3.3400e-07 274

- amplitude\_pitch\_dumbbell 1 3.3400e-07 274

- var\_yaw\_arm 1 3.3400e-07 274

- min\_pitch\_dumbbell 1 3.3400e-07 274

- kurtosis\_roll\_dumbbell 1 3.3400e-07 274

- max\_picth\_dumbbell 1 3.3400e-07 274

- min\_roll\_belt 1 3.3400e-07 274

- kurtosis\_picth\_dumbbell 1 3.3400e-07 274

- avg\_roll\_arm 1 3.3400e-07 274

- max\_roll\_belt 1 3.3400e-07 274

- amplitude\_roll\_belt 1 3.3400e-07 274

- stddev\_roll\_forearm 1 3.3400e-07 274

- skewness\_yaw\_arm 1 3.3400e-07 274

- var\_roll\_dumbbell 1 3.3400e-07 274

- skewness\_roll\_forearm 1 3.3400e-07 274

- skewness\_pitch\_forearm 1 3.3400e-07 274

- amplitude\_roll\_arm 1 3.3400e-07 274

- stddev\_yaw\_dumbbell 1 3.3400e-07 274

- min\_roll\_arm 1 3.3400e-07 274

- max\_roll\_arm 1 3.3400e-07 274

- var\_roll\_forearm 1 3.3400e-07 274

- var\_roll\_belt 1 3.3400e-07 274

- kurtosis\_picth\_forearm 1 3.3400e-07 274

- stddev\_roll\_dumbbell 1 3.3400e-07 274

- gyros\_dumbbell\_y 1 3.3400e-07 274

- stddev\_yaw\_arm 1 3.3400e-07 274

- stddev\_yaw\_forearm 1 3.3400e-07 274

- skewness\_roll\_belt.1 1 3.3400e-07 274

- var\_pitch\_arm 1 3.3400e-07 274

- max\_picth\_belt 1 3.3400e-07 274

- var\_yaw\_forearm 1 3.3400e-07 274

- skewness\_pitch\_dumbbell 1 3.3400e-07 274

- avg\_roll\_belt 1 3.3400e-07 274

- var\_roll\_arm 1 3.3400e-07 274

- skewness\_roll\_arm 1 3.3400e-07 274

- skewness\_pitch\_arm 1 3.3400e-07 274

- max\_yaw\_forearm 1 3.3400e-07 274

- magnet\_dumbbell\_z 1 3.3400e-07 274

- stddev\_roll\_belt 1 3.3400e-07 274

- amplitude\_yaw\_forearm 1 3.3400e-07 274

- skewness\_roll\_dumbbell 1 3.3400e-07 274

- new\_window 1 3.3400e-07 274

- avg\_yaw\_dumbbell 1 3.3400e-07 274

- stddev\_roll\_arm 1 3.3400e-07 274

- var\_accel\_forearm 1 3.3400e-07 274

- gyros\_belt\_x 1 3.3400e-07 274

- min\_pitch\_belt 1 3.3400e-07 274

- min\_roll\_dumbbell 1 3.3400e-07 274

- amplitude\_roll\_dumbbell 1 3.3400e-07 274

- min\_roll\_forearm 1 3.3400e-07 274

- max\_roll\_dumbbell 1 3.3400e-07 274

- avg\_roll\_forearm 1 3.3400e-07 274

- kurtosis\_roll\_forearm 1 3.3400e-07 274

- avg\_pitch\_belt 1 3.3400e-07 274

- stddev\_pitch\_arm 1 3.3400e-07 274

- max\_roll\_forearm 1 3.3400e-07 274

- avg\_yaw\_forearm 1 3.3400e-07 274

- amplitude\_roll\_forearm 1 3.3400e-07 274

- max\_yaw\_arm 1 3.3400e-07 274

- avg\_pitch\_dumbbell 1 3.3400e-07 274

- avg\_yaw\_arm 1 3.3400e-07 274

- min\_yaw\_arm 1 3.3400e-07 274

- max\_yaw\_belt 1 3.3400e-07 274

- kurtosis\_roll\_belt 1 3.3400e-07 274

- kurtosis\_picth\_belt 1 3.3400e-07 274

- var\_pitch\_forearm 1 3.3400e-07 274

- stddev\_yaw\_belt 1 3.3400e-07 274

- stddev\_pitch\_belt 1 3.3400e-07 274

- kurtosis\_roll\_arm 1 3.3400e-07 274

- max\_picth\_arm 1 3.3400e-07 274

- stddev\_pitch\_forearm 1 3.3400e-07 274

- yaw\_arm 1 3.3400e-07 274

- avg\_pitch\_arm 1 3.3400e-07 274

- skewness\_roll\_belt 1 3.3400e-07 274

- accel\_belt\_z 1 3.3400e-07 274

- var\_accel\_dumbbell 1 3.3400e-07 274

- gyros\_dumbbell\_x 1 3.3500e-07 274

- var\_accel\_arm 1 3.3500e-07 274

- accel\_belt\_x 1 3.3500e-07 274

- total\_accel\_arm 1 3.3500e-07 274

- magnet\_dumbbell\_x 1 3.3500e-07 274

- gyros\_dumbbell\_z 1 3.3500e-07 274

- gyros\_belt\_z 1 3.3600e-07 274

- magnet\_belt\_y 1 3.3600e-07 274

- gyros\_forearm\_x 1 3.3600e-07 274

- magnet\_forearm\_y 1 3.3600e-07 274

- gyros\_arm\_x 1 3.3600e-07 274

- yaw\_forearm 1 3.3600e-07 274

- roll\_belt 1 3.3600e-07 274

- yaw\_dumbbell 1 3.3600e-07 274

- roll\_arm 1 3.3600e-07 274

- gyros\_arm\_y 1 3.3600e-07 274

- magnet\_arm\_z 1 3.3600e-07 274

- accel\_dumbbell\_z 1 3.3700e-07 274

- accel\_dumbbell\_y 1 3.3700e-07 274

- magnet\_arm\_x 1 3.3700e-07 274

- total\_accel\_forearm 1 3.3700e-07 274

- user\_name 1 3.3800e-07 274

- gyros\_arm\_z 1 3.3800e-07 274

- kurtosis\_yaw\_arm 1 3.3800e-07 274

- total\_accel\_belt 1 3.3900e-07 274

- magnet\_belt\_x 1 3.3900e-07 274

- pitch\_belt 1 3.3900e-07 274

- cvtd\_timestamp 1 3.3900e-07 274

- accel\_belt\_y 1 3.3900e-07 274

- total\_accel\_dumbbell 1 3.4000e-07 274

- gyros\_belt\_y 1 3.4200e-07 274

- roll\_dumbbell 1 3.4200e-07 274

- accel\_forearm\_x 1 3.4200e-07 274

- accel\_dumbbell\_x 1 3.4200e-07 274

- raw\_timestamp\_part\_2 1 3.4200e-07 274

- raw\_timestamp\_part\_1 1 3.4200e-07 274

- accel\_forearm\_y 1 3.4300e-07 274

- magnet\_belt\_z 1 3.4300e-07 274

- pitch\_dumbbell 1 3.4300e-07 274

- gyros\_forearm\_y 1 3.4300e-07 274

- pitch\_forearm 1 3.4300e-07 274

- accel\_forearm\_z 1 3.4400e-07 274

- gyros\_forearm\_z 1 3.4800e-07 274

- accel\_arm\_z 1 3.5000e-07 274

- magnet\_forearm\_x 1 3.5700e-07 274

- magnet\_forearm\_z 1 3.6200e-07 274

- magnet\_arm\_y 1 3.7500e-07 274

- accel\_arm\_y 1 3.8300e-07 274

- pitch\_arm 1 4.1200e-07 274

- accel\_arm\_x 1 4.9600e-07 274

- var\_total\_accel\_belt 1 5.5400e-07 274

- num\_window 1 6.0900e-07 274

- var\_pitch\_belt 1 6.1300e-07 274

- min\_pitch\_forearm 1 5.6859e-05 274

<none> 3.3400e-07 276

Step: AIC=274

classe ~ user\_name + raw\_timestamp\_part\_1 + raw\_timestamp\_part\_2 +

cvtd\_timestamp + new\_window + num\_window + roll\_belt + pitch\_belt +

total\_accel\_belt + kurtosis\_roll\_belt + kurtosis\_picth\_belt +

skewness\_roll\_belt + skewness\_roll\_belt.1 + max\_roll\_belt +

max\_picth\_belt + max\_yaw\_belt + min\_roll\_belt + min\_pitch\_belt +

amplitude\_roll\_belt + var\_total\_accel\_belt + avg\_roll\_belt +

stddev\_roll\_belt + var\_roll\_belt + avg\_pitch\_belt + stddev\_pitch\_belt +

var\_pitch\_belt + stddev\_yaw\_belt + var\_yaw\_belt + gyros\_belt\_x +

gyros\_belt\_y + gyros\_belt\_z + accel\_belt\_x + accel\_belt\_y +

accel\_belt\_z + magnet\_belt\_x + magnet\_belt\_y + magnet\_belt\_z +

roll\_arm + pitch\_arm + yaw\_arm + total\_accel\_arm + var\_accel\_arm +

avg\_roll\_arm + stddev\_roll\_arm + var\_roll\_arm + avg\_pitch\_arm +

stddev\_pitch\_arm + var\_pitch\_arm + avg\_yaw\_arm + stddev\_yaw\_arm +

var\_yaw\_arm + gyros\_arm\_x + gyros\_arm\_y + gyros\_arm\_z + accel\_arm\_x +

accel\_arm\_y + accel\_arm\_z + magnet\_arm\_x + magnet\_arm\_y +

magnet\_arm\_z + kurtosis\_roll\_arm + kurtosis\_yaw\_arm + skewness\_roll\_arm +

skewness\_pitch\_arm + skewness\_yaw\_arm + max\_roll\_arm + max\_picth\_arm +

max\_yaw\_arm + min\_roll\_arm + min\_pitch\_arm + min\_yaw\_arm +

amplitude\_roll\_arm + roll\_dumbbell + pitch\_dumbbell + yaw\_dumbbell +

kurtosis\_roll\_dumbbell + kurtosis\_picth\_dumbbell + skewness\_roll\_dumbbell

+

skewness\_pitch\_dumbbell + max\_roll\_dumbbell + max\_picth\_dumbbell +

max\_yaw\_dumbbell + min\_roll\_dumbbell + min\_pitch\_dumbbell +

amplitude\_roll\_dumbbell + amplitude\_pitch\_dumbbell + total\_accel\_dumbbell

+

var\_accel\_dumbbell + stddev\_roll\_dumbbell + var\_roll\_dumbbell +

avg\_pitch\_dumbbell + var\_pitch\_dumbbell + avg\_yaw\_dumbbell +

stddev\_yaw\_dumbbell + gyros\_dumbbell\_x + gyros\_dumbbell\_y +

gyros\_dumbbell\_z + accel\_dumbbell\_x + accel\_dumbbell\_y +

accel\_dumbbell\_z + magnet\_dumbbell\_x + magnet\_dumbbell\_y +

magnet\_dumbbell\_z + pitch\_forearm + yaw\_forearm + kurtosis\_roll\_forearm +

kurtosis\_picth\_forearm + skewness\_roll\_forearm + skewness\_pitch\_forearm +

max\_roll\_forearm + max\_picth\_forearm + max\_yaw\_forearm +

min\_roll\_forearm + min\_pitch\_forearm + amplitude\_roll\_forearm +

amplitude\_yaw\_forearm + total\_accel\_forearm + var\_accel\_forearm +

avg\_roll\_forearm + stddev\_roll\_forearm + var\_roll\_forearm +

avg\_pitch\_forearm + stddev\_pitch\_forearm + var\_pitch\_forearm +

avg\_yaw\_forearm + stddev\_yaw\_forearm + var\_yaw\_forearm +

gyros\_forearm\_x + gyros\_forearm\_y + gyros\_forearm\_z + accel\_forearm\_x +

accel\_forearm\_y + accel\_forearm\_z + magnet\_forearm\_x + magnet\_forearm\_y +

magnet\_forearm\_z

Df Deviance AIC

- min\_pitch\_arm 1 0.00 272.00

- var\_pitch\_dumbbell 1 0.00 272.00

- var\_yaw\_belt 1 0.00 272.00

- magnet\_dumbbell\_y 1 0.00 272.00

- avg\_pitch\_forearm 1 0.00 272.00

- avg\_roll\_belt 1 0.00 272.00

- max\_picth\_forearm 1 0.00 272.00

- min\_roll\_belt 1 0.00 272.00

- amplitude\_pitch\_dumbbell 1 0.00 272.00

- min\_pitch\_dumbbell 1 0.00 272.00

- max\_picth\_dumbbell 1 0.00 272.00

- var\_yaw\_arm 1 0.00 272.00

- max\_roll\_belt 1 0.00 272.00

- max\_yaw\_dumbbell 1 0.00 272.00

- kurtosis\_roll\_dumbbell 1 0.00 272.00

- kurtosis\_picth\_dumbbell 1 0.00 272.00

- amplitude\_roll\_belt 1 0.00 272.00

- avg\_roll\_arm 1 0.00 272.00

- skewness\_yaw\_arm 1 0.00 272.00

- var\_roll\_dumbbell 1 0.00 272.00

- amplitude\_roll\_arm 1 0.00 272.00

- min\_roll\_arm 1 0.00 272.00

- max\_roll\_arm 1 0.00 272.00

- stddev\_roll\_forearm 1 0.00 272.00

- skewness\_pitch\_forearm 1 0.00 272.00

- skewness\_roll\_forearm 1 0.00 272.00

- var\_roll\_forearm 1 0.00 272.00

- gyros\_dumbbell\_y 1 0.00 272.00

- kurtosis\_picth\_forearm 1 0.00 272.00

- kurtosis\_yaw\_arm 1 0.00 272.00

- max\_picth\_belt 1 0.00 272.00

- stddev\_roll\_dumbbell 1 0.00 272.00

- var\_roll\_belt 1 0.00 272.00

- stddev\_yaw\_arm 1 0.00 272.00

- stddev\_yaw\_forearm 1 0.00 272.00

- stddev\_yaw\_dumbbell 1 0.00 272.00

- var\_pitch\_arm 1 0.00 272.00

- kurtosis\_roll\_forearm 1 0.00 272.00

- magnet\_dumbbell\_z 1 0.00 272.00

- skewness\_roll\_belt.1 1 0.00 272.00

- var\_yaw\_forearm 1 0.00 272.00

- skewness\_roll\_arm

1 0.00 272.00

- skewness\_pitch\_dumbbell

1 0.00 272.00

- var\_accel\_forearm

1 0.00 272.00

- stddev\_yaw\_belt

1 0.00 272.00

- amplitude\_yaw\_forearm

1 0.00 272.00

- var\_roll\_arm

1 0.00 272.00

- stddev\_roll\_belt

1 0.00 272.00

- skewness\_roll\_dumbbell

1 0.00 272.00

- avg\_yaw\_dumbbell

1 0.00 272.00

- kurtosis\_picth\_belt

1 0.00 272.00

- gyros\_belt\_x

1 0.00 272.00

- stddev\_pitch\_arm

1 0.00 272.00

- avg\_pitch\_belt

1 0.00 272.00

- min\_pitch\_belt

1 0.00 272.00

- skewness\_pitch\_arm

1 0.00 272.00

- avg\_pitch\_dumbbell

1 0.00 272.00

- max\_yaw\_arm

1 0.00 272.00

- stddev\_roll\_arm

1 0.00 272.00

- avg\_yaw\_forearm

1 0.00 272.00

- max\_roll\_dumbbell

1 0.00 272.00

- amplitude\_roll\_dumbbell

1 0.00 272.00

- min\_roll\_dumbbell

1 0.00 272.00

- avg\_pitch\_arm

1 0.00 272.00

- min\_pitch\_forearm

1 0.00 272.00

- avg\_yaw\_arm

1 0.00 272.00

- avg\_roll\_forearm

1 0.00 272.00

- var\_total\_accel\_belt

1 0.00 272.00

- new\_window

1 0.00 272.00

- max\_roll\_forearm

1 0.00 272.00

- min\_roll\_forearm

1 0.00 272.00

- var\_pitch\_forearm

1 0.00 272.00

- amplitude\_roll\_forearm

1 0.00 272.00

- max\_yaw\_belt

1 0.00 272.00

- min\_yaw\_arm

1 0.00 272.00

- kurtosis\_roll\_belt

1 0.00 272.00

- skewness\_roll\_belt

1 0.00 272.00

- stddev\_pitch\_belt

1 0.00 272.00

- stddev\_pitch\_forearm

1 0.00 272.00

- max\_picth\_arm

1 0.00 272.00

- var\_pitch\_belt

1 0.00 272.00

- yaw\_arm

1 0.00 272.00

- var\_accel\_arm

1 0.00 272.00

- accel\_belt\_z

1 0.00 272.00

- gyros\_dumbbell\_x

1 0.00 272.00

- accel\_belt\_x

1 0.00 272.00

- total\_accel\_arm

1 0.00 272.00

- magnet\_dumbbell\_x

1 0.00 272.00

- gyros\_dumbbell\_z

1 0.00 272.00

- gyros\_belt\_z

1 0.00 272.00

- roll\_belt

1 0.00 272.00

- magnet\_belt\_y

1 0.00 272.00

- gyros\_forearm\_x

1 0.00 272.00

- magnet\_forearm\_y

1 0.00 272.00

- gyros\_arm\_x

1 0.00 272.00

- yaw\_forearm

1 0.00 272.00

- yaw\_dumbbell

1 0.00 272.00

- roll\_arm

1 0.00 272.00

- gyros\_arm\_y 1 0.00 272.00

- magnet\_arm\_z 1 0.00 272.00

- accel\_dumbbell\_z 1 0.00 272.00

- accel\_dumbbell\_y 1 0.00 272.00

- magnet\_arm\_x 1 0.00 272.00

- total\_accel\_forearm 1 0.00 272.00

- var\_accel\_dumbbell 1 0.00 272.00

- user\_name 1 0.00 272.00

- gyros\_arm\_z 1 0.00 272.00

- total\_accel\_belt 1 0.00 272.00

- magnet\_belt\_x 1 0.00 272.00

- pitch\_belt 1 0.00 272.00

- cvtd\_timestamp 1 0.00 272.00

- accel\_belt\_y 1 0.00 272.00

- total\_accel\_dumbbell 1 0.00 272.00

- roll\_dumbbell 1 0.00 272.00

- accel\_forearm\_x 1 0.00 272.00

- accel\_dumbbell\_x 1 0.00 272.00

- raw\_timestamp\_part\_2 1 0.00 272.00

- raw\_timestamp\_part\_1 1 0.00 272.00

- accel\_forearm\_y 1 0.00 272.00

- magnet\_belt\_z 1 0.00 272.00

- pitch\_dumbbell 1 0.00 272.00

- gyros\_forearm\_y 1 0.00 272.00

- pitch\_forearm 1 0.00 272.00

- accel\_forearm\_z 1 0.00 272.00

- accel\_arm\_x 1 0.00 272.00

- gyros\_forearm\_z 1 0.00 272.00

- accel\_arm\_z 1 0.00 272.00

- magnet\_forearm\_x 1 0.00 272.00

- magnet\_forearm\_z 1 0.00 272.00

- accel\_arm\_y 1 0.00 272.00

- pitch\_arm 1 0.00 272.00

- magnet\_arm\_y 1 0.00 272.00

- num\_window 1 0.00 272.00

- kurtosis\_roll\_arm 1 0.00 272.00

- gyros\_belt\_y 1 0.41 272.41

<none> 0.00 274.00

- max\_yaw\_forearm 1 432.52 704.52

Step: AIC=272

classe ~ user\_name + raw\_timestamp\_part\_1 + raw\_timestamp\_part\_2 +

cvtd\_timestamp + new\_window + num\_window + roll\_belt + pitch\_belt +

total\_accel\_belt + kurtosis\_roll\_belt + kurtosis\_picth\_belt +

skewness\_roll\_belt + skewness\_roll\_belt.1 + max\_roll\_belt +

max\_picth\_belt + max\_yaw\_belt + min\_roll\_belt + min\_pitch\_belt +

amplitude\_roll\_belt + var\_total\_accel\_belt + avg\_roll\_belt +

stddev\_roll\_belt + var\_roll\_belt + avg\_pitch\_belt + stddev\_pitch\_belt +

var\_pitch\_belt + stddev\_yaw\_belt + var\_yaw\_belt + gyros\_belt\_x +

gyros\_belt\_y + gyros\_belt\_z + accel\_belt\_x + accel\_belt\_y +

accel\_belt\_z + magnet\_belt\_x + magnet\_belt\_y + magnet\_belt\_z +

roll\_arm + pitch\_arm + yaw\_arm + total\_accel\_arm + var\_accel\_arm +

avg\_roll\_arm + stddev\_roll\_arm + var\_roll\_arm + avg\_pitch\_arm +

stddev\_pitch\_arm + var\_pitch\_arm + avg\_yaw\_arm + stddev\_yaw\_arm +

var\_yaw\_arm + gyros\_arm\_x + gyros\_arm\_y + gyros\_arm\_z + accel\_arm\_x +

accel\_arm\_y + accel\_arm\_z + magnet\_arm\_x + magnet\_arm\_y +

magnet\_arm\_z + kurtosis\_roll\_arm + kurtosis\_yaw\_arm + skewness\_roll\_arm +

skewness\_pitch\_arm + skewness\_yaw\_arm + max\_roll\_arm + max\_picth\_arm +

max\_yaw\_arm + min\_roll\_arm + min\_yaw\_arm + amplitude\_roll\_arm +

roll\_dumbbell + pitch\_dumbbell + yaw\_dumbbell + kurtosis\_roll\_dumbbell +

kurtosis\_picth\_dumbbell + skewness\_roll\_dumbbell + skewness\_pitch\_dumbbel

l +

max\_roll\_dumbbell + max\_picth\_dumbbell + max\_yaw\_dumbbell +

min\_roll\_dumbbell + min\_pitch\_dumbbell + amplitude\_roll\_dumbbell +

amplitude\_pitch\_dumbbell + total\_accel\_dumbbell + var\_accel\_dumbbell +

stddev\_roll\_dumbbell + var\_roll\_dumbbell + avg\_pitch\_dumbbell +

var\_pitch\_dumbbell + avg\_yaw\_dumbbell + stddev\_yaw\_dumbbell +

gyros\_dumbbell\_x + gyros\_dumbbell\_y + gyros\_dumbbell\_z +

accel\_dumbbell\_x + accel\_dumbbell\_y + accel\_dumbbell\_z +

magnet\_dumbbell\_x + magnet\_dumbbell\_y + magnet\_dumbbell\_z +

pitch\_forearm + yaw\_forearm + kurtosis\_roll\_forearm + kurtosis\_picth\_fore

arm +

skewness\_roll\_forearm + skewness\_pitch\_forearm + max\_roll\_forearm +

max\_picth\_forearm + max\_yaw\_forearm + min\_roll\_forearm +

min\_pitch\_forearm + amplitude\_roll\_forearm + amplitude\_yaw\_forearm +

total\_accel\_forearm + var\_accel\_forearm + avg\_roll\_forearm +

stddev\_roll\_forearm + var\_roll\_forearm + avg\_pitch\_forearm +

stddev\_pitch\_forearm + var\_pitch\_forearm + avg\_yaw\_forearm +

stddev\_yaw\_forearm + var\_yaw\_forearm + gyros\_forearm\_x +

gyros\_forearm\_y + gyros\_forearm\_z + accel\_forearm\_x + accel\_forearm\_y +

accel\_forearm\_z + magnet\_forearm\_x + magnet\_forearm\_y + magnet\_forearm\_z

Df Deviance AIC

- var\_pitch\_dumbbell 1 0.000 270.00

- var\_yaw\_belt 1 0.000 270.00

- avg\_roll\_belt 1 0.000 270.00

- avg\_pitch\_forearm 1 0.000 270.00

- magnet\_dumbbell\_y 1 0.000 270.00

- max\_picth\_forearm 1 0.000 270.00

- amplitude\_pitch\_dumbbell 1 0.000 270.00

- min\_pitch\_dumbbell 1 0.000 270.00

- max\_picth\_dumbbell 1 0.000 270.00

- min\_roll\_belt 1 0.000 270.00

- var\_yaw\_arm 1 0.000 270.00

- max\_roll\_belt 1 0.000 270.00

- max\_yaw\_dumbbell 1 0.000 270.00

- kurtosis\_roll\_dumbbell 1 0.000 270.00

- kurtosis\_picth\_dumbbell 1 0.000 270.00

- avg\_roll\_arm 1 0.000 270.00

- amplitude\_roll\_arm 1 0.000 270.00

- var\_roll\_dumbbell 1 0.000 270.00

- skewness\_yaw\_arm 1 0.000 270.00

- min\_roll\_arm 1 0.000 270.00

- max\_roll\_arm 1 0.000 270.00

- amplitude\_roll\_belt 1 0.000 270.00

- skewness\_roll\_forearm 1 0.000 270.00

- stddev\_yaw\_dumbbell 1 0.000 270.00

- gyros\_dumbbell\_y 1 0.000 270.00

- var\_roll\_belt 1 0.000 270.00

- kurtosis\_yaw\_arm 1 0.000 270.00

- skewness\_pitch\_forearm 1 0.000 270.00

- max\_picth\_belt 1 0.000 270.00

- var\_roll\_forearm 1 0.000 270.00

- stddev\_yaw\_arm 1 0.000 270.00

- stddev\_roll\_forearm

1 0.000 270.00

- stddev\_yaw\_forearm

1 0.000 270.00

- var\_pitch\_arm

1 0.000 270.00

- kurtosis\_picth\_forearm

1 0.000 270.00

- kurtosis\_roll\_forearm

1 0.000 270.00

- magnet\_dumbbell\_z

1 0.000 270.00

- var\_yaw\_forearm

1 0.000 270.00

- var\_roll\_arm

1 0.000 270.00

- skewness\_pitch\_dumbbell

1 0.000 270.00

- skewness\_roll\_arm

1 0.000 270.00

- max\_yaw\_forearm

1 0.000 270.00

- stddev\_roll\_belt

1 0.000 270.00

- avg\_yaw\_dumbbell

1 0.000 270.00

- stddev\_yaw\_belt

1 0.000 270.00

- skewness\_roll\_dumbbell

1 0.000 270.00

- amplitude\_yaw\_forearm

1 0.000 270.00

- kurtosis\_picth\_belt

1 0.000 270.00

- skewness\_roll\_belt.1

1 0.000 270.00

- var\_accel\_forearm

1 0.000 270.00

- gyros\_belt\_x

1 0.000 270.00

- var\_accel\_dumbbell

1 0.000 270.00

- avg\_pitch\_belt

1 0.000 270.00

- stddev\_roll\_arm

1 0.000 270.00

- min\_pitch\_belt

1 0.000 270.00

- stddev\_roll\_dumbbell

1 0.000 270.00

- stddev\_pitch\_arm

1 0.000 270.00

- var\_total\_accel\_belt

1 0.000 270.00

- avg\_pitch\_dumbbell

1 0.000 270.00

- avg\_yaw\_forearm

1 0.000 270.00

- max\_roll\_forearm

1 0.000 270.00

- min\_pitch\_forearm

1 0.000 270.00

- amplitude\_roll\_forearm

1 0.000 270.00

- min\_roll\_forearm

1 0.000 270.00

- new\_window

1 0.000 270.00

- var\_pitch\_forearm

1 0.000 270.00

- avg\_yaw\_arm

1 0.000 270.00

- avg\_roll\_forearm

1 0.000 270.00

- skewness\_pitch\_arm

1 0.000 270.00

- max\_picth\_arm

1 0.000 270.00

- max\_yaw\_arm

1 0.000 270.00

- skewness\_roll\_belt

1 0.000 270.00

- kurtosis\_roll\_arm

1 0.000 270.00

- max\_yaw\_belt

1 0.000 270.00

- stddev\_pitch\_belt

1 0.00

0 270.00

- kurtosis\_roll\_belt

1 0.000 270.00

- var\_pitch\_belt

1 0.000 270.00

- yaw\_arm

1 0.000 270.00

- stddev\_pitch\_forearm

1 0.000 270.00

- min\_yaw\_arm

1 0.000 270.00

- accel\_belt\_z

1 0.000 270.00

- var\_accel\_arm

1 0.000 270.00

- gyros\_dumbbell\_x

1 0.000 270.00

- accel\_belt\_x

1 0.000 270.00

- total\_accel\_arm

1 0.000 270.00

- magnet\_dumbbell\_x

1 0.000 270.00

- gyros\_dumbbell\_z

1 0.000 270.00

- gyros\_belt\_z

1 0.000 270.00

- magnet\_belt\_y 1 0.000 270.00

- roll\_belt 1 0.000 270.00

- gyros\_forearm\_x 1 0.000 270.00

- magnet\_forearm\_y 1 0.000 270.00

- gyros\_arm\_x 1 0.000 270.00

- yaw\_forearm 1 0.000 270.00

- yaw\_dumbbell 1 0.000 270.00

- roll\_arm 1 0.000 270.00

- gyros\_arm\_y 1 0.000 270.00

- magnet\_arm\_z 1 0.000 270.00

- accel\_dumbbell\_z 1 0.000 270.00

- accel\_dumbbell\_y 1 0.000 270.00

- magnet\_arm\_x 1 0.000 270.00

- total\_accel\_forearm 1 0.000 270.00

- user\_name 1 0.000 270.00

- gyros\_arm\_z 1 0.000 270.00

- total\_accel\_belt 1 0.000 270.00

- magnet\_belt\_x 1 0.000 270.00

- pitch\_belt 1 0.000 270.00

- cvtd\_timestamp 1 0.000 270.00

- accel\_belt\_y 1 0.000 270.00

- total\_accel\_dumbbell 1 0.000 270.00

- gyros\_belt\_y 1 0.000 270.00

- roll\_dumbbell 1 0.000 270.00

- accel\_forearm\_x 1 0.000 270.00

- accel\_dumbbell\_x 1 0.000 270.00

- raw\_timestamp\_part\_2 1 0.000 270.00

- raw\_timestamp\_part\_1 1 0.000 270.00

- accel\_forearm\_y 1 0.000 270.00

- magnet\_belt\_z 1 0.000 270.00

- pitch\_dumbbell 1 0.000 270.00

- gyros\_forearm\_y 1 0.000 270.00

- pitch\_forearm 1 0.000 270.00

- accel\_forearm\_z 1 0.000 270.00

- accel\_arm\_x 1 0.000 270.00

- gyros\_forearm\_z 1 0.000 270.00

- accel\_arm\_z 1 0.000 270.00

- magnet\_forearm\_x 1 0.000 270.00

- magnet\_forearm\_z 1 0.000 270.00

- accel\_arm\_y 1 0.000 270.00

- magnet\_arm\_y 1 0.000 270.00

- max\_roll\_dumbbell 1 0.000 270.00

- pitch\_arm 1 0.000 270.00

- avg\_pitch\_arm 1 0.000 270.00

- num\_window 1 0.000 270.00

- amplitude\_roll\_dumbbell 1 0.001 270.00

<none> 0.000 272.00

- min\_roll\_dumbbell 1 72.087 342.09

Step: AIC=270

classe ~ user\_name + raw\_timestamp\_part\_1 + raw\_timestamp\_part\_2 +

cvtd\_timestamp + new\_window + num\_window + roll\_belt + pitch\_belt +

total\_accel\_belt + kurtosis\_roll\_belt + kurtosis\_picth\_belt +

skewness\_roll\_belt + skewness\_roll\_belt.1 + max\_roll\_belt +

max\_picth\_belt + max\_yaw\_belt + min\_roll\_belt + min\_pitch\_belt +

amplitude\_roll\_belt + var\_total\_accel\_belt + avg\_roll\_belt +

stddev\_roll\_belt + var\_roll\_belt + avg\_pitch\_belt + stddev\_pitch\_belt +

var\_pitch\_belt + stddev\_yaw\_belt + var\_yaw\_belt + gyros\_belt\_x +

gyros\_belt\_y + gyros\_belt\_z + accel\_belt\_x + accel\_belt\_y +

accel\_belt\_z + magnet\_belt\_x + magnet\_belt\_y + magnet\_belt\_z +

roll\_arm + pitch\_arm + yaw\_arm + total\_accel\_arm + var\_accel\_arm +

avg\_roll\_arm + stddev\_roll\_arm + var\_roll\_arm + avg\_pitch\_arm +

stddev\_pitch\_arm + var\_pitch\_arm + avg\_yaw\_arm + stddev\_yaw\_arm +

var\_yaw\_arm + gyros\_arm\_x + gyros\_arm\_y + gyros\_arm\_z + accel\_arm\_x +

accel\_arm\_y + accel\_arm\_z + magnet\_arm\_x + magnet\_arm\_y +

magnet\_arm\_z + kurtosis\_roll\_arm + kurtosis\_yaw\_arm + skewness\_roll\_arm +

skewness\_pitch\_arm + skewness\_yaw\_arm + max\_roll\_arm + max\_picth\_arm +

max\_yaw\_arm + min\_roll\_arm + min\_yaw\_arm + amplitude\_roll\_arm +

roll\_dumbbell + pitch\_dumbbell + yaw\_dumbbell + kurtosis\_roll\_dumbbell +

kurtosis\_picth\_dumbbell + skewness\_roll\_dumbbell + skewness\_pitch\_dumbbel

l +

max\_roll\_dumbbell + max\_picth\_dumbbell + max\_yaw\_dumbbell +

min\_roll\_dumbbell + min\_pitch\_dumbbell + amplitude\_roll\_dumbbell +

amplitude\_pitch\_dumbbell + total\_accel\_dumbbell + var\_accel\_dumbbell +

stddev\_roll\_dumbbell + var\_roll\_dumbbell + avg\_pitch\_dumbbell +

avg\_yaw\_dumbbell + stddev\_yaw\_dumbbell + gyros\_dumbbell\_x +

gyros\_dumbbell\_y + gyros\_dumbbell\_z + accel\_dumbbell\_x +

accel\_dumbbell\_y + accel\_dumbbell\_z + magnet\_dumbbell\_x +

magnet\_dumbbell\_y + magnet\_dumbbell\_z + pitch\_forearm + yaw\_forearm +

kurtosis\_roll\_forearm + kurtosis\_picth\_forearm + skewness\_roll\_forearm +

skewness\_pitch\_forearm + max\_roll\_forearm + max\_picth\_forearm +

max\_yaw\_forearm + min\_roll\_forearm + min\_pitch\_forearm +

amplitude\_roll\_forearm + amplitude\_yaw\_forearm + total\_accel\_forearm +

var\_accel\_forearm + avg\_roll\_forearm + stddev\_roll\_forearm +

var\_roll\_forearm + avg\_pitch\_forearm + stddev\_pitch\_forearm +

var\_pitch\_forearm + avg\_yaw\_forearm + stddev\_yaw\_forearm +

var\_yaw\_forearm + gyros\_forearm\_x + gyros\_forearm\_y + gyros\_forearm\_z +

accel\_forearm\_x + accel\_forearm\_y + accel\_forearm\_z + magnet\_forearm\_x +

magnet\_forearm\_y + magnet\_forearm\_z

Df Deviance AIC

- max\_picth\_forearm 1 0.00000033 268

- avg\_pitch\_forearm 1 0.00000033 268

- avg\_roll\_belt 1 0.00000033 268

- var\_yaw\_belt 1 0.00000033 268

- magnet\_dumbbell\_y 1 0.00000033 268

- min\_roll\_belt 1 0.00000033 268

- max\_roll\_belt 1 0.00000033 268

- amplitude\_pitch\_dumbbell 1 0.00000033 268

- var\_yaw\_arm 1 0.00000033 268

- min\_pitch\_dumbbell 1 0.00000033 268

- max\_picth\_dumbbell 1 0.00000033 268

- max\_yaw\_dumbbell 1 0.00000033 268

- kurtosis\_roll\_dumbbell 1 0.00000033 268

- amplitude\_roll\_belt 1 0.00000033 268

- kurtosis\_picth\_dumbbell 1 0.00000033 268

- var\_roll\_dumbbell 1 0.00000033 268

- skewness\_yaw\_arm 1 0.00000033 268

- avg\_roll\_arm 1 0.00000033 268

- max\_picth\_belt 1 0.00000033 268

- var\_roll\_belt 1 0.00000033 268

- max\_roll\_arm 1 0.00000033 268

- min\_roll\_arm 1 0.00000033 268

- amplitude\_roll\_arm 1 0.00000033 268

- gyros\_dumbbell\_y 1 0.00000033 268

- kurtosis\_yaw\_arm 1 0.00000033 268

- stddev\_yaw\_dumbbell 1 0.00000033 268

- var\_roll\_forearm 1 0.00000033 268

- stddev\_roll\_dumbbell 1 0.00000033 268

- stddev\_yaw\_arm 1 0.00000033 268

- stddev\_yaw\_forearm 1 0.00000033 268

- skewness\_pitch\_forearm 1 0.00000033 268

- stddev\_roll\_forearm 1 0.00000033 268

- kurtosis\_picth\_forearm 1 0.00000033 268

- var\_pitch\_arm 1 0.00000033 268

- var\_yaw\_forearm 1 0.00000033 268

- kurtosis\_roll\_forearm 1 0.00000033 268

- magnet\_dumbbell\_z 1 0.00000033 268

- var\_roll\_arm 1 0.00000033 268

- max\_yaw\_forearm 1 0.00000033 268

- skewness\_roll\_arm 1 0.00000033 268

- skewness\_pitch\_dumbbell 1 0.00000033 268

- stddev\_roll\_belt 1 0.00000033 268

- min\_pitch\_belt 1 0.00000033 268

- skewness\_roll\_belt.1 1 0.00000033 268

- stddev\_yaw\_belt 1 0.00000033 268

- amplitude\_yaw\_forearm 1 0.00000033 268

- avg\_yaw\_dumbbell 1 0.00000033 268

- gyros\_belt\_x 1 0.00000033 268

- kurtosis\_picth\_belt 1 0.00000033 268

- var\_accel\_forearm 1 0.00000033 268

- var\_accel\_dumbbell 1 0.00000033 268

- stddev\_roll\_arm 1 0.00000033 268

- avg\_pitch\_arm 1 0.00000033 268

- stddev\_pitch\_arm 1 0.00000033 268

- avg\_pitch\_dumbbell 1 0.00000033 268

- min\_pitch\_forearm 1 0.00000033 268

- skewness\_roll\_dumbbell 1 0.00000033 268

- var\_total\_accel\_belt 1 0.00000033 268

- avg\_yaw\_forearm 1 0.00000033 268

- min\_roll\_forearm 1 0.00000033 268

- max\_roll\_forearm 1 0.00000033 268

- amplitude\_roll\_forearm 1 0.00000033 268

- new\_window 1 0.00000033 268

- avg\_yaw\_arm 1 0.00000033 268

- var\_pitch\_forearm 1 0.00000033 268

- avg\_roll\_forearm 1 0.00000033 268

- max\_yaw\_arm 1 0.00000033 268

- skewness\_roll\_belt 1 0.00000033 268

- max\_picth\_arm 1 0.00000033 268

- stddev\_pitch\_belt 1 0.00000033 268

- max\_yaw\_belt 1 0.00000033 268

- stddev\_pitch\_forearm 1 0.00000033 268

- yaw\_arm 1 0.00000033 268

- kurtosis\_roll\_arm 1 0.00000033 268

- var\_pitch\_belt 1 0.00000033 268

- kurtosis\_roll\_belt 1 0.00000033 268

- min\_yaw\_arm 1 0.00000033 268

- accel\_belt\_z 1 0.00000033 268

- var\_accel\_arm 1 0.00000033 268

- gyros\_dumbbell\_x 1 0.00000033 268

- accel\_belt\_x 1 0.00000034 268

- total\_accel\_arm 1 0.00000034 268

- magnet\_dumbbell\_x 1 0.00000034 268

- gyros\_dumbbell\_z 1 0.00000034 268

- roll\_belt 1 0.00000034 268

- gyros\_belt\_z 1 0.00000034 268

- magnet\_belt\_y 1 0.00000034 268

- gyros\_forearm\_x 1 0.00000034 268

- magnet\_forearm\_y 1 0.00000034 268

- gyros\_arm\_x 1 0.00000034 268

- yaw\_forearm 1 0.00000034 268

- yaw\_dumbbell 1 0.00000034 268

- roll\_arm 1 0.00000034 268

- gyros\_arm\_y 1 0.00000034 268

- magnet\_arm\_z 1 0.00000034 268

- accel\_dumbbell\_z 1 0.00000034 268

- accel\_dumbbell\_y 1 0.00000034 268

- magnet\_arm\_x 1 0.00000034 268

- total\_accel\_forearm 1 0.00000034 268

- user\_name 1 0.00000034 268

- gyros\_arm\_z 1 0.00000034 268

- total\_accel\_belt 1 0.00000034 268

- magnet\_belt\_x 1 0.00000034 268

- pitch\_belt 1 0.00000034 268

- cvtd\_timestamp 1 0.00000034 268

- accel\_belt\_y 1 0.00000034 268

- total\_accel\_dumbbell 1 0.00000034 268

- gyros\_belt\_y 1 0.00000034 268

- roll\_dumbbell 1 0.00000034 268

- accel\_forearm\_x 1 0.00000034 268

- accel\_dumbbell\_x 1 0.00000034 268

- raw\_timestamp\_part\_2 1 0.00000034 268

- raw\_timestamp\_part\_1 1 0.00000034 268

- accel\_forearm\_y 1 0.00000034 268

- magnet\_belt\_z 1 0.00000034 268

- pitch\_dumbbell 1 0.00000034 268

- gyros\_forearm\_y 1 0.00000034 268

- pitch\_forearm 1 0.00000034 268

- accel\_forearm\_z 1 0.00000034 268

- accel\_arm\_x 1 0.00000034 268

- gyros\_forearm\_z 1 0.00000035 268

- accel\_arm\_z 1 0.00000035 268

- magnet\_forearm\_x 1 0.00000036 268

- magnet\_forearm\_z 1 0.00000036 268

- magnet\_arm\_y 1 0.00000037 268

- accel\_arm\_y 1 0.00000038 268

- pitch\_arm 1 0.00000041 268

- skewness\_roll\_forearm 1 0.00000046 268

- num\_window 1 0.00000061 268

- skewness\_pitch\_arm 1 0.00000165 268

- min\_roll\_dumbbell 1 0.00000299 268

- max\_roll\_dumbbell 1 0.00000318 268

- amplitude\_roll\_dumbbell 1 0.00000337 268

- avg\_pitch\_belt 1 0.00041081 268

<none> 0.00000033 270

Step: AIC=268

classe ~ user\_name + raw\_timestamp\_part\_1 + raw\_timestamp\_part\_2 +

cvtd\_timestamp + new\_window + num\_window + roll\_belt + pitch\_belt +

total\_accel\_belt + kurtosis\_roll\_belt + kurtosis\_picth\_belt +

skewness\_roll\_belt + skewness\_roll\_belt.1 + max\_roll\_belt +

max\_picth\_belt + max\_yaw\_belt + min\_roll\_belt + min\_pitch\_belt +

amplitude\_roll\_belt + var\_total\_accel\_belt + avg\_roll\_belt +

stddev\_roll\_belt + var\_roll\_belt + avg\_pitch\_belt + stddev\_pitch\_belt +

var\_pitch\_belt + stddev\_yaw\_belt + var\_yaw\_belt + gyros\_belt\_x +

gyros\_belt\_y + gyros\_belt\_z + accel\_belt\_x + accel\_belt\_y +

accel\_belt\_z + magnet\_belt\_x + magnet\_belt\_y + magnet\_belt\_z +

roll\_arm + pitch\_arm + yaw\_arm + total\_accel\_arm + var\_accel\_arm +

avg\_roll\_arm + stddev\_roll\_arm + var\_roll\_arm + avg\_pitch\_arm +

stddev\_pitch\_arm + var\_pitch\_arm + avg\_yaw\_arm + stddev\_yaw\_arm +

var\_yaw\_arm + gyros\_arm\_x + gyros\_arm\_y + gyros\_arm\_z + accel\_arm\_x +

accel\_arm\_y + accel\_arm\_z + magnet\_arm\_x + magnet\_arm\_y +

magnet\_arm\_z + kurtosis\_roll\_arm + kurtosis\_yaw\_arm + skewness\_roll\_arm +

skewness\_pitch\_arm + skewness\_yaw\_arm + max\_roll\_arm + max\_picth\_arm +

max\_yaw\_arm + min\_roll\_arm + min\_yaw\_arm + amplitude\_roll\_arm +

roll\_dumbbell + pitch\_dumbbell + yaw\_dumbbell + kurtosis\_roll\_dumbbell +

kurtosis\_picth\_dumbbell + skewness\_roll\_dumbbell + skewness\_pitch\_dumbbel

l +

max\_roll\_dumbbell + max\_picth\_dumbbell + max\_yaw\_dumbbell +

min\_roll\_dumbbell + min\_pitch\_dumbbell + amplitude\_roll\_dumbbell +

amplitude\_pitch\_dumbbell + total\_accel\_dumbbell + var\_accel\_dumbbell +

stddev\_roll\_dumbbell + var\_roll\_dumbbell + avg\_pitch\_dumbbell +

avg\_yaw\_dumbbell + stddev\_yaw\_dumbbell + gyros\_dumbbell\_x +

gyros\_dumbbell\_y + gyros\_dumbbell\_z + accel\_dumbbell\_x +

accel\_dumbbell\_y + accel\_dumbbell\_z + magnet\_dumbbell\_x +

magnet\_dumbbell\_y + magnet\_dumbbell\_z + pitch\_forearm + yaw\_forearm +

kurtosis\_roll\_forearm + kurtosis\_picth\_forearm + skewness\_roll\_forearm +

skewness\_pitch\_forearm + max\_roll\_forearm + max\_yaw\_forearm +

min\_roll\_forearm + min\_pitch\_forearm + amplitude\_roll\_forearm +

amplitude\_yaw\_forearm + total\_accel\_forearm + var\_accel\_forearm +

avg\_roll\_forearm + stddev\_roll\_forearm + var\_roll\_forearm +

avg\_pitch\_forearm + stddev\_pitch\_forearm + var\_pitch\_forearm +

avg\_yaw\_forearm + stddev\_yaw\_forearm + var\_yaw\_forearm +

gyros\_forearm\_x + gyros\_forearm\_y + gyros\_forearm\_z + accel\_forearm\_x +

accel\_forearm\_y + accel\_forearm\_z + magnet\_forearm\_x + magnet\_forearm\_y +

magnet\_forearm\_z

Df Deviance AIC

- kurtosis\_yaw\_arm 1 3.34e-07 266

- var\_roll\_dumbbell 1 3.34e-07 266

- kurtosis\_roll\_dumbbell 1 3.34e-07 266

- max\_yaw\_dumbbell 1 3.34e-07 266

- avg\_pitch\_forearm 1 3.34e-07 266

- avg\_roll\_belt 1 3.34e-07 266

- max\_picth\_belt 1 3.34e-07 266

- magnet\_dumbbell\_y 1 3.34e-07 266

- skewness\_yaw\_arm 1 3.34e-07 266

- stddev\_yaw\_dumbbell 1 3.34e-07 266

- var\_yaw\_arm 1 3.34e-07 266

- var\_roll\_belt 1 3.34e-07 266

- stddev\_roll\_dumbbell 1 3.34e-07 266

- amplitude\_roll\_arm 1 3.34e-07 266

- min\_roll\_arm 1 3.34e-07 266

- max\_roll\_arm 1 3.34e-07 266

- skewness\_pitch\_forearm 1 3.34e-07 266

- var\_roll\_forearm 1 3.34e-07 266

- kurtosis\_picth\_dumbbell 1 3.34e-07 266

- min\_roll\_belt 1 3.34e-07 266

- max\_roll\_belt 1 3.34e-07 266

- stddev\_roll\_forearm 1 3.34e-07 266

- skewness\_roll\_forearm 1 3.34e-07 266

- amplitude\_roll\_belt 1 3.34e-07 266

- var\_yaw\_belt 1 3.34e-07 266

- stddev\_yaw\_arm 1 3.34e-07 266

- kurtosis\_roll\_forearm 1 3.34e-07 266

- var\_roll\_arm 1 3.34e-07 266

- gyros\_dumbbell\_y 1 3.34e-07 266

- var\_pitch\_arm 1 3.34e-07 266

- max\_yaw\_forearm 1 3.34e-07 266

- skewness\_roll\_arm 1 3.34e-07 266

- kurtosis\_picth\_forearm 1 3.34e-07 266

- amplitude\_pitch\_dumbbell 1 3.34e-07 266

- min\_pitch\_dumbbell 1 3.34e-07 266

- max\_picth\_dumbbell 1 3.34e-07 266

- stddev\_roll\_belt 1 3.34e-07 266

- skewness\_roll\_belt.1 1 3.34e-07 266

- avg\_roll\_arm 1 3.34e-07 266

- var\_accel\_forearm 1 3.34e-07 266

- magnet\_dumbbell\_z 1 3.34e-07 266

- avg\_yaw\_dumbbell 1 3.34e-07 266

- avg\_pitch\_arm 1 3.34e-07 266

- skewness\_pitch\_dumbbell 1 3.34e-07 266

- min\_pitch\_belt 1 3.34e-07 266

- kurtosis\_picth\_belt 1 3.34e-07 266

- var\_total\_accel\_belt 1 3.34e-07 266

- min\_roll\_dumbbell 1 3.34e-07 266

- amplitude\_roll\_dumbbell 1 3.34e-07 266

- stddev\_yaw\_belt 1 3.34e-07 266

- max\_roll\_dumbbell 1 3.34e-07 266

- avg\_pitch\_belt 1 3.34e-07 266

- stddev\_roll\_arm 1 3.34e-07 266

- avg\_pitch\_dumbbell 1 3.34e-07 266

- stddev\_pitch\_arm 1 3.34e-07 266

- gyros\_belt\_x 1 3.34e-07 266

- skewness\_roll\_dumbbell 1 3.34e-07 266

- var\_accel\_dumbbell 1 3.34e-07 266

- var\_pitch\_forearm 1 3.34e-07 266

- avg\_roll\_forearm 1 3.34e-07 266

- max\_roll\_forearm 1 3.34e-07 266

- new\_window 1 3.34e-07 266

- min\_roll\_forearm 1 3.34e-07 266

- amplitude\_roll\_forearm 1 3.34e-07 266

- skewness\_pitch\_arm 1 3.34e-07 266

- max\_picth\_arm 1 3.34e-07 266

- max\_yaw\_belt 1 3.34e-07 266

- kurtosis\_roll\_belt 1 3.34e-07 266

- kurtosis\_roll\_arm 1 3.34e-07 266

- var\_pitch\_belt 1 3.34e-07 266

- var\_yaw\_forearm 1 3.34e-07 266

- min\_pitch\_forearm 1 3.34e-07 266

- yaw\_arm

1 3.34e

-07 266

- stddev\_pitch\_forearm

1 3.34e

-07 266

- min\_yaw\_arm

1 3.34e

-07 266

- max\_yaw\_arm

1 3.34e

-07 266

- avg\_yaw\_forearm

1 3.34e

-07 266

- accel\_belt\_z

1 3.34e

-07 266

- var\_accel\_arm

1 3.34e

-07 266

- stddev\_yaw\_forearm

1 3.35e

-07 266

- gyros\_dumbbell\_x

1 3.35e

-

0

7 266

- accel\_belt\_x

1 3.35e

-07 266

- total\_accel\_arm

1 3.35e

-07 266

- gyros\_dumbbell\_z

1 3.35e

-07 266

- stddev\_pitch\_belt

1 3.35e

-07 266

- magnet\_dumbbell\_x

1 3.35e

-07 266

- gyros\_belt\_z

1 3.36e

-07 266

- magnet\_belt\_y

1 3.36e

-07 266

- roll\_belt

1 3.36e

-07 266

- gyros\_arm\_x

1 3.36e

-07 266

- gyros\_forearm\_x

1 3.36e

-07 266

- magnet\_forearm\_y

1 3.36e

-07 266

- yaw\_forearm

1 3.36e

-07 266

- yaw\_dumbbell

1 3.36e

-07 266

- roll\_arm

1 3.36e

-07 266

- gyros\_arm\_y

1 3.36e

-07 266

- magnet\_arm\_z

1 3.36e

-07 266

- accel\_dumbbell\_z

1 3.37e

-07 266

- accel\_dumbbell\_y

1 3.37e

-07 266

- avg\_yaw\_arm

1 3.37e

-07 266

- magnet\_arm\_x

1 3.37e

-07 266

- total\_accel\_forearm

1 3.37e

-07 266

- user\_name

1 3.38e

-07 266

- gyros\_arm\_z

1 3.38e

-07 266

- total\_accel\_belt

1 3.39e

-07 266

- magnet\_belt\_x

1 3.39e

-07 266

- pitch\_belt

1 3.39e

-07 266

- cvtd\_timestamp

1 3.39e

-07 266

- accel\_belt\_y

1 3.39e

-07 266

- total\_accel\_dumbbell

1 3.40e

-07 266

- gyros\_belt\_y

1 3.42e

-07 266

- roll\_dumbbell

1 3.42e

-07 266

- accel\_forearm\_x

1 3.42e

-07 266

- accel\_dumbbell\_x

1 3.42e

-07 266

- raw\_timestamp\_part\_2

1 3.42e

-07 266

- raw\_timestamp\_part\_1

1 3.42e

-07 266

- accel\_forearm\_y

1 3.43e

-07 266

- magnet\_belt\_z

1 3.43e

-07 266

- pitch\_dumbbell

1 3.43e

-07 266

- gyros\_forearm\_y

1 3.43e

-07 266

- pitch\_forearm

1 3.43e

-07 266

- accel\_forearm\_z

1 3.44e

-07 266

- accel\_arm\_x

1 3.44e

-07 266

- gyros\_forearm\_z

1 3.48e

-07 266

- accel\_arm\_z

1 3.50e

-07 266

- magnet\_forearm\_x

1 3.57e

-07 266

- amplitude\_yaw\_forearm

1 3.59e

-07 266

- magnet\_forearm\_z

1 3.62e

-07 266

- magnet\_arm\_y

1 3.74e

-07 266

- accel\_arm\_y 1 3.83e-07 266

- pitch\_arm 1 4.12e-07 266

- num\_window 1 6.08e-07 266

- skewness\_roll\_belt 1 1.57e-04 266

<none> 3.34e-07 268

Step: AIC=266

classe ~ user\_name + raw\_timestamp\_part\_1 + raw\_timestamp\_part\_2 +

cvtd\_timestamp + new\_window + num\_window + roll\_belt + pitch\_belt +

total\_accel\_belt + kurtosis\_roll\_belt + kurtosis\_picth\_belt +

skewness\_roll\_belt + skewness\_roll\_belt.1 + max\_roll\_belt +

max\_picth\_belt + max\_yaw\_belt + min\_roll\_belt + min\_pitch\_belt +

amplitude\_roll\_belt + var\_total\_accel\_belt + avg\_roll\_belt +

stddev\_roll\_belt + var\_roll\_belt + avg\_pitch\_belt + stddev\_pitch\_belt +

var\_pitch\_belt + stddev\_yaw\_belt + var\_yaw\_belt + gyros\_belt\_x +

gyros\_belt\_y + gyros\_belt\_z + accel\_belt\_x + accel\_belt\_y +

accel\_belt\_z + magnet\_belt\_x + magnet\_belt\_y + magnet\_belt\_z +

roll\_arm + pitch\_arm + yaw\_arm + total\_accel\_arm + var\_accel\_arm +

avg\_roll\_arm + stddev\_roll\_arm + var\_roll\_arm + avg\_pitch\_arm +

stddev\_pitch\_arm + var\_pitch\_arm + avg\_yaw\_arm + stddev\_yaw\_arm +

var\_yaw\_arm + gyros\_arm\_x + gyros\_arm\_y + gyros\_arm\_z + accel\_arm\_x +

accel\_arm\_y + accel\_arm\_z + magnet\_arm\_x + magnet\_arm\_y +

magnet\_arm\_z + kurtosis\_roll\_arm + skewness\_roll\_arm + skewness\_pitch\_arm

+

skewness\_yaw\_arm + max\_roll\_arm + max\_picth\_arm + max\_yaw\_arm +

min\_roll\_arm + min\_yaw\_arm + amplitude\_roll\_arm + roll\_dumbbell +

pitch\_dumbbell + yaw\_dumbbell + kurtosis\_roll\_dumbbell +

kurtosis\_picth\_dumbbell + skewness\_roll\_dumbbell + skewness\_pitch\_dumbbel

l +

max\_roll\_dumbbell + max\_picth\_dumbbell + max\_yaw\_dumbbell +

min\_roll\_dumbbell + min\_pitch\_dumbbell + amplitude\_roll\_dumbbell +

amplitude\_pitch\_dumbbell + total\_accel\_dumbbell + var\_accel\_dumbbell +

stddev\_roll\_dumbbell + var\_roll\_dumbbell + avg\_pitch\_dumbbell +

avg\_yaw\_dumbbell + stddev\_yaw\_dumbbell + gyros\_dumbbell\_x +

gyros\_dumbbell\_y + gyros\_dumbbell\_z + accel\_dumbbell\_x +

accel\_dumbbell\_y + accel\_dumbbell\_z + magnet\_dumbbell\_x +

magnet\_dumbbell\_y + magnet\_dumbbell\_z + pitch\_forearm + yaw\_forearm +

kurtosis\_roll\_forearm + kurtosis\_picth\_forearm + skewness\_roll\_forearm +

skewness\_pitch\_forearm + max\_roll\_forearm + max\_yaw\_forearm +

min\_roll\_forearm + min\_pitch\_forearm + amplitude\_roll\_forearm +

amplitude\_yaw\_forearm + total\_accel\_forearm + var\_accel\_forearm +

avg\_roll\_forearm + stddev\_roll\_forearm + var\_roll\_forearm +

avg\_pitch\_forearm + stddev\_pitch\_forearm + var\_pitch\_forearm +

avg\_yaw\_forearm + stddev\_yaw\_forearm + var\_yaw\_forearm +

gyros\_forearm\_x + gyros\_forearm\_y + gyros\_forearm\_z + accel\_forearm\_x +

accel\_forearm\_y + accel\_forearm\_z + magnet\_forearm\_x + magnet\_forearm\_y +

magnet\_forearm\_z

Df Deviance AIC

- skewness\_yaw\_arm 1 0 264

- stddev\_roll\_dumbbell 1 0 264

- var\_roll\_belt 1 0 264

- kurtosis\_roll\_dumbbell 1 0 264

- max\_yaw\_dumbbell 1 0 264

- var\_roll\_dumbbell 1 0 264

- stddev\_yaw\_dumbbell 1 0 264

- var\_yaw\_arm 1 0 264

- min\_roll\_arm

1

0 264

- amplitude\_roll\_arm

1

0 264

- magnet\_dumbbell\_y

1

0 264

- max\_roll\_arm

1

0 264

- max\_picth\_belt

1

0 264

- min\_roll\_belt

1

0 264

- max\_roll\_belt

1

0 264

- skewness\_pitch\_forearm

1

0 264

- kurtosis\_picth\_dumbbell

1

0 264

- stddev\_roll\_forearm

1

0 264

- var\_pitch\_arm

1

0 264

- skewness\_roll\_forearm

1

0 264

- avg\_pitch\_forearm

1

0 264

- kurtosis\_roll\_forearm

1

0 264

- var\_yaw\_belt

1

0 264

- gyros\_dumbbell\_y

1

0 264

- avg\_roll\_belt

1

0 264

- amplitude\_roll\_belt

1

0 264

- max\_yaw\_forearm

1

0 264

- kurtosis\_picth\_forearm

1

0 264

- skewness\_roll\_arm

1

0 264

- stddev\_yaw\_arm

1

0 264

- var\_roll\_forearm

1

0 264

- avg\_yaw\_dumbbell

1

0 264

- amplitude\_pitch\_dumbbell

1

0 264

- avg\_pitch\_arm

1

0 264

- min\_pitch\_dumbbell

1

0 264

- skewness\_roll\_belt.1

1

0 264

- max\_picth\_dumbbell

1

0 264

- stddev\_roll\_belt

1

0 264

- stddev\_yaw\_belt

1

0 264

- amplitude\_yaw\_forearm

1

0 264

- avg\_roll\_arm

1

0 264

- stddev\_roll\_arm

1

0 264

-

min\_pitch\_belt

1

0 264

- kurtosis\_picth\_belt

1

0 264

- avg\_pitch\_belt

1

0 264

- stddev\_pitch\_arm

1

0 264

- gyros\_belt\_x

1

0 264

- var\_accel\_dumbbell

1

0 264

- magnet\_dumbbell\_z

1

0 264

- var\_pitch\_forearm

1

0 264

- avg\_pitch\_dumbbell

1

0 264

- max\_yaw\_arm

1

0 264

- skewness\_pitch\_arm

1

0 264

- min\_roll\_dumbbell

1

0 264

- new\_window

1

0 264

- stddev\_pitch\_forearm

1

0 264

- kurtosis\_roll\_arm

1

0 264

- amplitude\_roll\_dumbbell

1

0 264

- var\_total\_accel\_belt

1

0 264

- var\_pitch\_belt

1

0 264

- max\_roll\_dumbbell

1

0 264

- skewness\_roll\_belt

1

0 264

- stddev\_pitch\_belt

1

0 264

- max\_picth\_arm

1

0 264

- stddev\_yaw\_forearm

1

0 264

- min\_yaw\_arm

1

0 264

- yaw\_arm

1

0 264

- avg\_yaw\_arm

1

0 264

- kurtosis\_roll\_belt

1

0 264

- accel\_belt\_z

1

0 264

- max\_yaw\_belt

1

0 264

- min\_roll\_forearm

1

0 264

- max\_roll\_forearm

1

0 264

- skewness\_pitch\_dumbbell

1

0 264

- amplitude\_roll\_forearm

1

0 264

- gyros\_dumbbell\_x

1

0 264

- var\_yaw\_forearm

1

0 264

- accel\_belt\_x

1

0 264

- skewness\_roll\_dumbbell

1

0 264

- gyros\_dumbbell\_z

1

0 264

- magnet\_dumbbell\_x

1

0 264

- roll\_belt

1

0 264

- gyros\_belt\_z

1

0 264

- magnet\_belt\_y

1

0 264

- var\_roll\_arm

1

0 264

- gyros\_forearm\_x

1

0 264

- gyros\_arm\_x

1

0 264

- magnet\_forearm\_y

1

0 264

- yaw\_forearm

1

0 264

- yaw\_dumbbell

1

0 264

- roll\_arm

1

0 264

- gyros\_arm\_y

1

0 264

- avg\_roll\_forearm

1

0 264

- magnet\_arm\_z

1

0 264

- accel\_dumbbell\_z

1

0 264

- var\_accel\_forearm

1

0 264

- accel\_dumbbell\_y

1

0 264

- magnet\_arm\_x

1

0 264

- total\_accel\_forearm

1

0 26

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- user\_name

1

0 264

- gyros\_arm\_z

1

0 264

- total\_accel\_belt

1

0 264

- magnet\_belt\_x

1

0 264

- pitch\_belt

1

0 264

- cvtd\_timestamp

1

0 264

- accel\_belt\_y

1

0 264

- total\_accel\_dumbbell

1

0 264

- gyros\_belt\_y

1

0 264

- roll\_dumbbell

1

0 264

- accel\_forearm\_x

1

0 264

- accel\_dumbbell\_x

1

0 264

- raw\_timestamp\_part\_2

1

0 264

- raw\_timestamp\_part\_1

1

0 264

- magnet\_belt\_z

1

0 264

- accel\_forearm\_y

1

0 264

- min\_pitch\_forearm

1

0 264

- pitch\_dumbbell

1

0 264

- pitch\_forearm

1

0 264

- gyros\_forearm\_y

1

0 264

- accel\_arm\_x

1

0 264

- accel\_forearm\_z

1

0 264

- gyros\_forearm\_z

1

0 264

- accel\_arm\_z 1 0 264

- magnet\_forearm\_x 1 0 264

- magnet\_forearm\_z 1 0 264

- var\_accel\_arm 1 0 264

- magnet\_arm\_y 1 0 264

- accel\_arm\_y 1 0 264

- pitch\_arm 1 0 264

- total\_accel\_arm 1 0 264

- num\_window 1 0 264

<none> 0 266

- avg\_yaw\_forearm 1 44694 44958

Step: AIC=264

classe ~ user\_name + raw\_timestamp\_part\_1 + raw\_timestamp\_part\_2 +

cvtd\_timestamp + new\_window + num\_window + roll\_belt + pitch\_belt +

total\_accel\_belt + kurtosis\_roll\_belt + kurtosis\_picth\_belt +

skewness\_roll\_belt + skewness\_roll\_belt.1 + max\_roll\_belt +

max\_picth\_belt + max\_yaw\_belt + min\_roll\_belt + min\_pitch\_belt +

amplitude\_roll\_belt + var\_total\_accel\_belt + avg\_roll\_belt +

stddev\_roll\_belt + var\_roll\_belt + avg\_pitch\_belt + stddev\_pitch\_belt +

var\_pitch\_belt + stddev\_yaw\_belt + var\_yaw\_belt + gyros\_belt\_x +

gyros\_belt\_y + gyros\_belt\_z + accel\_belt\_x + accel\_belt\_y +

accel\_belt\_z + magnet\_belt\_x + magnet\_belt\_y + magnet\_belt\_z +

roll\_arm + pitch\_arm + yaw\_arm + total\_accel\_arm + var\_accel\_arm +

avg\_roll\_arm + stddev\_roll\_arm + var\_roll\_arm + avg\_pitch\_arm +

stddev\_pitch\_arm + var\_pitch\_arm + avg\_yaw\_arm + stddev\_yaw\_arm +

var\_yaw\_arm + gyros\_arm\_x + gyros\_arm\_y + gyros\_arm\_z + accel\_arm\_x +

accel\_arm\_y + accel\_arm\_z + magnet\_arm\_x + magnet\_arm\_y +

magnet\_arm\_z + kurtosis\_roll\_arm + skewness\_roll\_arm + skewness\_pitch\_arm

+

max\_roll\_arm + max\_picth\_arm + max\_yaw\_arm + min\_roll\_arm +

min\_yaw\_arm + amplitude\_roll\_arm + roll\_dumbbell + pitch\_dumbbell +

yaw\_dumbbell + kurtosis\_roll\_dumbbell + kurtosis\_picth\_dumbbell +

skewness\_roll\_dumbbell + skewness\_pitch\_dumbbell + max\_roll\_dumbbell +

max\_picth\_dumbbell + max\_yaw\_dumbbell + min\_roll\_dumbbell +

min\_pitch\_dumbbell + amplitude\_roll\_dumbbell + amplitude\_pitch\_dumbbell +

total\_accel\_dumbbell + var\_accel\_dumbbell + stddev\_roll\_dumbbell +

var\_roll\_dumbbell + avg\_pitch\_dumbbell + avg\_yaw\_dumbbell +

stddev\_yaw\_dumbbell + gyros\_dumbbell\_x + gyros\_dumbbell\_y +

gyros\_dumbbell\_z + accel\_dumbbell\_x + accel\_dumbbell\_y +

accel\_dumbbell\_z + magnet\_dumbbell\_x + magnet\_dumbbell\_y +

magnet\_dumbbell\_z + pitch\_forearm + yaw\_forearm + kurtosis\_roll\_forearm +

kurtosis\_picth\_forearm + skewness\_roll\_forearm + skewness\_pitch\_forearm +

max\_roll\_forearm + max\_yaw\_forearm + min\_roll\_forearm + min\_pitch\_forearm

+

amplitude\_roll\_forearm + amplitude\_yaw\_forearm + total\_accel\_forearm +

var\_accel\_forearm + avg\_roll\_forearm + stddev\_roll\_forearm +

var\_roll\_forearm + avg\_pitch\_forearm + stddev\_pitch\_forearm +

var\_pitch\_forearm + avg\_yaw\_forearm + stddev\_yaw\_forearm +

var\_yaw\_forearm + gyros\_forearm\_x + gyros\_forearm\_y + gyros\_forearm\_z +

accel\_forearm\_x + accel\_forearm\_y + accel\_forearm\_z + magnet\_forearm\_x +

magnet\_forearm\_y + magnet\_forearm\_z

Df Deviance AIC

- avg\_roll\_belt 1 3.3378e-07 262

- stddev\_roll\_dumbbell 1 3.3378e-07 262

- var\_roll\_belt 1 3.3379e-07 262

- stddev\_yaw\_dumbbell 1 3.3380e-07 262

- kurtosis\_roll\_dumbbell 1 3.3380e-07 262

- max\_yaw\_dumbbell 1 3.3380e-07 262

- var\_roll\_dumbbell 1 3.3381e-07 262

- var\_yaw\_arm 1 3.3381e-07 262

- magnet\_dumbbell\_y 1 3.3381e-07 262

- kurtosis\_picth\_dumbbell 1 3.3381e-07 262

- amplitude\_roll\_arm 1 3.3382e-07 262

- min\_roll\_arm 1 3.3382e-07 262

- max\_roll\_arm 1 3.3382e-07 262

- max\_picth\_belt 1 3.3382e-07 262

- var\_roll\_forearm 1 3.3383e-07 262

- stddev\_roll\_forearm 1 3.3383e-07 262

- min\_roll\_belt 1 3.3384e-07 262

- max\_roll\_belt 1 3.3384e-07 262

- amplitude\_roll\_belt 1 3.3384e-07 262

- skewness\_roll\_forearm 1 3.3385e-07 262

- skewness\_pitch\_forearm 1 3.3385e-07 262

- kurtosis\_roll\_forearm 1 3.3385e-07 262

- gyros\_dumbbell\_y 1 3.3386e-07 262

- avg\_pitch\_forearm 1 3.3386e-07 262

- var\_roll\_arm 1 3.3387e-07 262

- stddev\_roll\_belt 1 3.3387e-07 262

- var\_yaw\_belt 1 3.3387e-07 262

- kurtosis\_picth\_forearm 1 3.3389e-07 262

- kurtosis\_picth\_belt 1 3.3389e-07 262

- skewness\_roll\_arm 1 3.3389e-07 262

- min\_roll\_dumbbell 1 3.3389e-07 262

- amplitude\_roll\_dumbbell 1 3.3389e-07 262

- max\_roll\_dumbbell 1 3.3389e-07 262

- amplitude\_pitch\_dumbbell 1 3.3390e-07 262

- min\_pitch\_dumbbell 1 3.3390e-07 262

- max\_picth\_dumbbell 1 3.3390e-07 262

- avg\_pitch\_arm 1 3.3390e-07 262

- var\_total\_accel\_belt 1 3.3390e-07 262

- max\_yaw\_forearm 1 3.3391e-07 262

- stddev\_yaw\_arm 1 3.3391e-07 262

- skewness\_roll\_dumbbell 1 3.3391e-07 262

- avg\_roll\_arm 1 3.3392e-07 262

- amplitude\_yaw\_forearm 1 3.3392e-07 262

- skewness\_roll\_belt.1 1 3.3392e-07 262

- stddev\_yaw\_belt 1 3.3392e-07 262

- magnet\_dumbbell\_z 1 3.3392e-07 262

- avg\_pitch\_belt 1 3.3394e-07 262

- avg\_yaw\_dumbbell 1 3.3395e-07 262

- var\_accel\_dumbbell 1 3.3396e-07 262

- gyros\_belt\_x 1 3.3396e-07 262

- var\_pitch\_forearm 1 3.3400e-07 262

- avg\_yaw\_arm 1 3.3402e-07 262

- skewness\_pitch\_arm 1 3.3402e-07 262

- new\_window 1 3.3404e-07 262

- max\_yaw\_arm 1 3.3406e-07 262

- max\_picth\_arm 1 3.3406e-07 262

- stddev\_pitch\_forearm 1 3.3408e-07 262

- avg\_roll\_forearm 1 3.3408e-07 262

- var\_accel\_forearm 1 3.3408e-07 262

- max\_roll\_forearm 1 3.3408e-07 262

- min\_roll\_forearm 1 3.3408e-07 262

- stddev\_pitch\_arm 1 3.3408e-07 262

- amplitude\_roll\_forearm 1 3.3409e-07 262

- stddev\_pitch\_belt 1 3.3409e-07 262

- var\_pitch\_belt 1 3.3410e-07 262

- max\_yaw\_belt 1 3.3411e-07 262

- kurtosis\_roll\_belt 1 3.3411e-07 262

- kurtosis\_roll\_arm 1 3.3411e-07 262

- skewness\_roll\_belt 1 3.3411e-07 262

- var\_yaw\_forearm 1 3.3414e-07 262

- min\_yaw\_arm 1 3.3414e-07 262

- yaw\_arm 1 3.3417e-07 262

- var\_accel\_arm 1 3.3418e-07 262

- stddev\_yaw\_forearm 1 3.3420e-07 262

- avg\_yaw\_forearm 1 3.3421e-07 262

- accel\_belt\_z 1 3.3425e-07 262

- skewness\_pitch\_dumbbell 1 3.3468e-07 262

- min\_pitch\_forearm 1 3.3474e-07 262

- gyros\_dumbbell\_x 1 3.3474e-07 262

- accel\_belt\_x 1 3.3511e-07 262

- total\_accel\_arm 1 3.3529e-07 262

- gyros\_dumbbell\_z 1 3.3535e-07 262

- magnet\_dumbbell\_x 1 3.3539e-07 262

- roll\_belt 1 3.3563e-07 262

- gyros\_belt\_z 1 3.3565e-07 262

- magnet\_belt\_y 1 3.3571e-07 262

- gyros\_arm\_x 1 3.3586e-07 262

- gyros\_forearm\_x 1 3.3587e-07 262

- magnet\_forearm\_y 1 3.3587e-07 262

- yaw\_forearm 1 3.3600e-07 262

- yaw\_dumbbell 1 3.3603e-07 262

- roll\_arm 1 3.3612e-07 262

- gyros\_arm\_y 1 3.3614e-07 262

- min\_pitch\_belt 1 3.3637e-07 262

- magnet\_arm\_z 1 3.3639e-07 262

- accel\_dumbbell\_z 1 3.3658e-07 262

- accel\_dumbbell\_y 1 3.3695e-07 262

- magnet\_arm\_x 1 3.3710e-07 262

- total\_accel\_forearm 1 3.3732e-07 262

- user\_name 1 3.3765e-07 262

- stddev\_roll\_arm 1 3.3791e-07 262

- gyros\_arm\_z 1 3.3818e-07 262

- total\_accel\_belt 1 3.3869e-07 262

- magnet\_belt\_x 1 3.3899e-07 262

- pitch\_belt 1 3.3919e-07 262

- cvtd\_timestamp 1 3.3925e-07 262

- accel\_belt\_y 1 3.3945e-07 262

- total\_accel\_dumbbell 1 3.4021e-07 262

- gyros\_belt\_y 1 3.4194e-07 262

- roll\_dumbbell 1 3.4201e-07 262

- accel\_forearm\_x 1 3.4220e-07 262

- accel\_dumbbell\_x 1 3.4225e-07 262

- raw\_timestamp\_part\_2 1 3.4233e-07 262

- raw\_timestamp\_part\_1 1 3.4239e-07 262

- magnet\_belt\_z 1 3.4259e-07 262

- accel\_forearm\_y 1 3.4264e-07 262

- pitch\_dumbbell 1 3.4306e-07 262

- gyros\_forearm\_y 1 3.4306e-07 262

- pitch\_forearm 1 3.4347e-07 262

- accel\_forearm\_z 1 3.4396e-07 262

- accel\_arm\_x 1 3.4426e-07 262

- gyros\_forearm\_z 1 3.4805e-07 262

- accel\_arm\_z 1 3.5003e-07 262

- magnet\_forearm\_x 1 3.5691e-07 262

- magnet\_forearm\_z 1 3.6194e-07 262

- avg\_pitch\_dumbbell 1 3.7188e-07 262

- accel\_arm\_y 1 3.8311e-07 262

- pitch\_arm 1 4.1234e-07 262

- var\_pitch\_arm 1 4.1334e-07 262

- magnet\_arm\_y 1 4.3376e-07 262

- num\_window 1 6.0787e-07 262

<none> 3.3379e-07 264

Step: AIC=262

classe ~ user\_name + raw\_timestamp\_part\_1 + raw\_timestamp\_part\_2 +

cvtd\_timestamp + new\_window + num\_window + roll\_belt + pitch\_belt +

total\_accel\_belt + kurtosis\_roll\_belt + kurtosis\_picth\_belt +

skewness\_roll\_belt + skewness\_roll\_belt.1 + max\_roll\_belt +

max\_picth\_belt + max\_yaw\_belt + min\_roll\_belt + min\_pitch\_belt +

amplitude\_roll\_belt + var\_total\_accel\_belt + stddev\_roll\_belt +

var\_roll\_belt + avg\_pitch\_belt + stddev\_pitch\_belt + var\_pitch\_belt +

stddev\_yaw\_belt + var\_yaw\_belt + gyros\_belt\_x + gyros\_belt\_y +

gyros\_belt\_z + accel\_belt\_x + accel\_belt\_y + accel\_belt\_z +

magnet\_belt\_x + magnet\_belt\_y + magnet\_belt\_z + roll\_arm +

pitch\_arm + yaw\_arm + total\_accel\_arm + var\_accel\_arm + avg\_roll\_arm +

stddev\_roll\_arm + var\_roll\_arm + avg\_pitch\_arm + stddev\_pitch\_arm +

var\_pitch\_arm + avg\_yaw\_arm + stddev\_yaw\_arm + var\_yaw\_arm +

gyros\_arm\_x + gyros\_arm\_y + gyros\_arm\_z + accel\_arm\_x + accel\_arm\_y +

accel\_arm\_z + magnet\_arm\_x + magnet\_arm\_y + magnet\_arm\_z +

kurtosis\_roll\_arm + skewness\_roll\_arm + skewness\_pitch\_arm +

max\_roll\_arm + max\_picth\_arm + max\_yaw\_arm + min\_roll\_arm +

min\_yaw\_arm + amplitude\_roll\_arm + roll\_dumbbell + pitch\_dumbbell +

yaw\_dumbbell + kurtosis\_roll\_dumbbell + kurtosis\_picth\_dumbbell +

skewness\_roll\_dumbbell + skewness\_pitch\_dumbbell + max\_roll\_dumbbell +

max\_picth\_dumbbell + max\_yaw\_dumbbell + min\_roll\_dumbbell +

min\_pitch\_dumbbell + amplitude\_roll\_dumbbell + amplitude\_pitch\_dumbbell +

total\_accel\_dumbbell + var\_accel\_dumbbell + stddev\_roll\_dumbbell +

var\_roll\_dumbbell + avg\_pitch\_dumbbell + avg\_yaw\_dumbbell +

stddev\_yaw\_dumbbell + gyros\_dumbbell\_x + gyros\_dumbbell\_y +

gyros\_dumbbell\_z + accel\_dumbbell\_x + accel\_dumbbell\_y +

accel\_dumbbell\_z + magnet\_dumbbell\_x + magnet\_dumbbell\_y +

magnet\_dumbbell\_z + pitch\_forearm + yaw\_forearm + kurtosis\_roll\_forearm +

kurtosis\_picth\_forearm + skewness\_roll\_forearm + skewness\_pitch\_forearm +

max\_roll\_forearm + max\_yaw\_forearm + min\_roll\_forearm + min\_pitch\_forearm

+

amplitude\_roll\_forearm + amplitude\_yaw\_forearm + total\_accel\_forearm +

var\_accel\_forearm + avg\_roll\_forearm + stddev\_roll\_forearm +

var\_roll\_forearm + avg\_pitch\_forearm + stddev\_pitch\_forearm +

var\_pitch\_forearm + avg\_yaw\_forearm + stddev\_yaw\_forearm +

var\_yaw\_forearm + gyros\_forearm\_x + gyros\_forearm\_y + gyros\_forearm\_z +

accel\_forearm\_x + accel\_forearm\_y + accel\_forearm\_z + magnet\_forearm\_x +

magnet\_forearm\_y + magnet\_forearm\_z

Df Deviance AIC

- stddev\_roll\_dumbbell 1 3.3377e-07 260

- stddev\_yaw\_dumbbell 1 3.3378e-07 260

- var\_roll\_belt 1 3.3378e-07 260

- var\_roll\_dumbbell 1 3.3380e-07 260

- var\_yaw\_arm 1 3.3380e-07 260

- amplitude\_roll\_arm 1 3.3380e-07 260

- kurtosis\_roll\_dumbbell 1 3.3380e-07 260

- min\_roll\_arm 1 3.3380e-07 260

- max\_yaw\_dumbbell 1 3.3380e-07 260

- max\_roll\_arm 1 3.3380e-07 260

- kurtosis\_picth\_dumbbell 1 3.3381e-07 260

- magnet\_dumbbell\_y 1 3.3381e-07 260

- kurtosis\_roll\_forearm 1 3.3382e-07 260

- stddev\_roll\_forearm 1 3.3383e-07 260

- min\_roll\_belt 1 3.3383e-07 260

- max\_roll\_belt 1 3.3383e-07 260

- amplitude\_roll\_belt 1 3.3383e-07 260

- var\_roll\_forearm 1 3.3383e-07 260

- max\_picth\_belt 1 3.3384e-07 260

- skewness\_roll\_forearm 1 3.3384e-07 260

- var\_pitch\_arm 1 3.3385e-07 260

- stddev\_yaw\_arm 1 3.3385e-07 260

- gyros\_dumbbell\_y 1 3.3385e-07 260

- stddev\_roll\_belt 1 3.3385e-07 260

- avg\_pitch\_forearm 1 3.3385e-07 260

- skewness\_pitch\_forearm 1 3.3386e-07 260

- skewness\_roll\_arm 1 3.3387e-07 260

- var\_yaw\_belt 1 3.3387e-07 260

- kurtosis\_picth\_forearm 1 3.3388e-07 260

- avg\_pitch\_arm 1 3.3389e-07 260

- avg\_yaw\_dumbbell 1 3.3389e-07 260

- skewness\_pitch\_dumbbell 1 3.3390e-07 260

- var\_roll\_arm 1 3.3390e-07 260

- max\_yaw\_forearm 1 3.3390e-07 260

- avg\_roll\_arm 1 3.3390e-07 260

- skewness\_roll\_dumbbell 1 3.3391e-07 260

- min\_pitch\_belt 1 3.3391e-07 260

- var\_accel\_forearm 1 3.3391e-07 260

- amplitude\_pitch\_dumbbell 1 3.3391e-07 260

- min\_pitch\_dumbbell 1 3.3391e-07 260

- var\_total\_accel\_belt 1 3.3391e-07 260

- max\_picth\_dumbbell 1 3.3391e-07 260

- stddev\_yaw\_belt 1 3.3392e-07 260

- min\_roll\_dumbbell 1 3.3392e-07 260

- magnet\_dumbbell\_z 1 3.3392e-07 260

- amplitude\_roll\_dumbbell 1 3.3393e-07 260

- skewness\_roll\_belt.1 1 3.3394e-07 260

- max\_roll\_dumbbell 1 3.3395e-07 260

- avg\_pitch\_dumbbell 1 3.3396e-07 260

- gyros\_belt\_x 1 3.3396e-07 260

- var\_accel\_dumbbell 1 3.3396e-07 260

- var\_pitch\_forearm 1 3.3398e-07 260

- amplitude\_yaw\_forearm 1 3.3401e-07 260

- avg\_yaw\_forearm 1 3.3402e-07 260

- new\_window 1 3.3403e-07 260

- avg\_roll\_forearm 1 3.3405e-07 260

- skewness\_pitch\_arm 1 3.3405e-07 260

- avg\_yaw\_arm 1 3.3407e-07 260

- max\_yaw\_arm 1 3.3407e-07 260

- max\_picth\_arm 1 3.3408e-07 260

- stddev\_roll\_arm 1 3.3408e-07 260

- stddev\_pitch\_belt 1 3.3409e-07 260

- var\_pitch\_belt 1 3.3411e-07 260

- max\_yaw\_belt 1 3.3413e-07 260

- kurtosis\_roll\_belt 1 3.3413e-07 260

- skewness\_roll\_belt 1 3.3415e-07 260

- yaw\_arm 1 3.3417e-07 260

- amplitude\_roll\_forearm 1 3.3418e-07 260

- kurtosis\_roll\_arm 1 3.3419e-07 260

- stddev\_pitch\_forearm 1 3.3420e-07 260

- min\_yaw\_arm 1 3.3421e-07 260

- accel\_belt\_z 1 3.3425e-07 260

- min\_pitch\_forearm 1 3.3429e-07 260

- max\_roll\_forearm 1 3.3429e-07 260

- min\_roll\_forearm 1 3.3431e-07 260

- var\_accel\_arm 1 3.3432e-07 260

- avg\_pitch\_belt 1 3.3433e-07 260

- var\_yaw\_forearm 1 3.3440e-07 260

- gyros\_dumbbell\_x 1 3.3473e-07 260

- accel\_belt\_x 1 3.3510e-07 260

- gyros\_dumbbell\_z 1 3.3534e-07 260

- total\_accel\_arm 1 3.3537e-07 260

- magnet\_dumbbell\_x 1 3.3545e-07 260

- kurtosis\_picth\_belt 1 3.3554e-07 260

- roll\_belt 1 3.3557e-07 260

- gyros\_belt\_z 1 3.3565e-07 260

- magnet\_belt\_y 1 3.3571e-07 260

- gyros\_arm\_x 1 3.3586e-07 260

- magnet\_forearm\_y 1 3.3588e-07 260

- gyros\_forearm\_x 1 3.3591e-07 260

- yaw\_forearm 1 3.3599e-07 260

- yaw\_dumbbell 1 3.3604e-07 260

- stddev\_pitch\_arm 1 3.3610e-07 260

- roll\_arm 1 3.3611e-07 260

- gyros\_arm\_y 1 3.3615e-07 260

- magnet\_arm\_z 1 3.3637e-07 260

- accel\_dumbbell\_z 1 3.3658e-07 260

- accel\_dumbbell\_y 1 3.3695e-07 260

- magnet\_arm\_x 1 3.3710e-07 260

- stddev\_yaw\_forearm 1 3.3717e-07 260

- total\_accel\_forearm 1 3.3734e-07 260

- user\_name 1 3.3765e-07 260

- gyros\_arm\_z 1 3.3825e-07 260

- total\_accel\_belt 1 3.3870e-07 260

- magnet\_belt\_x 1 3.3898e-07 260

- pitch\_belt 1 3.3918e-07 260

- cvtd\_timestamp 1 3.3925e-07 260

- accel\_belt\_y 1 3.3944e-07 260

- roll\_dumbbell 1 3.4202e-07 260

- gyros\_belt\_y 1 3.4209e-07 260

- accel\_forearm\_x 1 3.4218e-07 260

- accel\_dumbbell\_x 1 3.4230e-07 260

- raw\_timestamp\_part\_1 1 3.4240e-07 260

- accel\_forearm\_y 1 3.4266e-07 260

- magnet\_belt\_z 1 3.4269e-07 260

- gyros\_forearm\_y 1 3.4307e-07 260

- pitch\_dumbbell 1 3.4308e-07 260

- pitch\_forearm 1 3.4354e-07 260

- accel\_forearm\_z 1 3.4396e-07 260

- raw\_timestamp\_part\_2 1 3.4412e-07 260

- accel\_arm\_x 1 3.4424e-07 260

- total\_accel\_dumbbell 1 3.4611e-07 260

- gyros\_forearm\_z 1 3.4804e-07 260

- accel\_arm\_z 1 3.5001e-07 260

- magnet\_forearm\_x 1 3.5693e-07 260

- magnet\_forearm\_z 1 3.6193e-07 260

- magnet\_arm\_y 1 3.7448e-07 260

- accel\_arm\_y 1 3.8292e-07 260

- pitch\_arm 1 4.1239e-07 260

- num\_window 1 6.0803e-07 260

<none> 3.3378e-07 262

Step: AIC=260

classe ~ user\_name + raw\_timestamp\_part\_1 + raw\_timestamp\_part\_2 +

cvtd\_timestamp + new\_window + num\_window + roll\_belt + pitch\_belt +

total\_accel\_belt + kurtosis\_roll\_belt + kurtosis\_picth\_belt +

skewness\_roll\_belt + skewness\_roll\_belt.1 + max\_roll\_belt +

max\_picth\_belt + max\_yaw\_belt + min\_roll\_belt + min\_pitch\_belt +

amplitude\_roll\_belt + var\_total\_accel\_belt + stddev\_roll\_belt +

var\_roll\_belt + avg\_pitch\_belt + stddev\_pitch\_belt + var\_pitch\_belt +

stddev\_yaw\_belt + var\_yaw\_belt + gyros\_belt\_x + gyros\_belt\_y +

gyros\_belt\_z + accel\_belt\_x + accel\_belt\_y + accel\_belt\_z +

magnet\_belt\_x + magnet\_belt\_y + magnet\_belt\_z + roll\_arm +

pitch\_arm + yaw\_arm + total\_accel\_arm + var\_accel\_arm + avg\_roll\_arm +

stddev\_roll\_arm + var\_roll\_arm + avg\_pitch\_arm + stddev\_pitch\_arm +

var\_pitch\_arm + avg\_yaw\_arm + stddev\_yaw\_arm + var\_yaw\_arm +

gyros\_arm\_x + gyros\_arm\_y + gyros\_arm\_z + accel\_arm\_x + accel\_arm\_y +

accel\_arm\_z + magnet\_arm\_x + magnet\_arm\_y + magnet\_arm\_z +

kurtosis\_roll\_arm + skewness\_roll\_arm + skewness\_pitch\_arm +

max\_roll\_arm + max\_picth\_arm + max\_yaw\_arm + min\_roll\_arm +

min\_yaw\_arm + amplitude\_roll\_arm + roll\_dumbbell + pitch\_dumbbell +

yaw\_dumbbell + kurtosis\_roll\_dumbbell + kurtosis\_picth\_dumbbell +

skewness\_roll\_dumbbell + skewness\_pitch\_dumbbell + max\_roll\_dumbbell +

max\_picth\_dumbbell + max\_yaw\_dumbbell + min\_roll\_dumbbell +

min\_pitch\_dumbbell + amplitude\_roll\_dumbbell + amplitude\_pitch\_dumbbell +

total\_accel\_dumbbell + var\_accel\_dumbbell + var\_roll\_dumbbell +

avg\_pitch\_dumbbell + avg\_yaw\_dumbbell + stddev\_yaw\_dumbbell +

gyros\_dumbbell\_x + gyros\_dumbbell\_y + gyros\_dumbbell\_z +

accel\_dumbbell\_x + accel\_dumbbell\_y + accel\_dumbbell\_z +

magnet\_dumbbell\_x + magnet\_dumbbell\_y + magnet\_dumbbell\_z +

pitch\_forearm + yaw\_forearm + kurtosis\_roll\_forearm + kurtosis\_picth\_fore

arm +

skewness\_roll\_forearm + skewness\_pitch\_forearm + max\_roll\_forearm +

max\_yaw\_forearm + min\_roll\_forearm + min\_pitch\_forearm +

amplitude\_roll\_forearm + amplitude\_yaw\_forearm + total\_accel\_forearm +

var\_accel\_forearm + avg\_roll\_forearm + stddev\_roll\_forearm +

var\_roll\_forearm + avg\_pitch\_forearm + stddev\_pitch\_forearm +

var\_pitch\_forearm + avg\_yaw\_forearm + stddev\_yaw\_forearm +

var\_yaw\_forearm + gyros\_forearm\_x + gyros\_forearm\_y + gyros\_forearm\_z +

accel\_forearm\_x + accel\_forearm\_y + accel\_forearm\_z + magnet\_forearm\_x +

magnet\_forearm\_y + magnet\_forearm\_z

Df Deviance AIC

- kurtosis\_roll\_dumbbell 1 3.3376e-07 258

- max\_yaw\_dumbbell 1 3.3376e-07 258

- var\_roll\_belt 1 3.3377e-07 258

- stddev\_yaw\_dumbbell 1 3.3377e-07 258

- amplitude\_roll\_arm 1 3.3378e-07 258

- min\_roll\_arm 1 3.3379e-07 258

- max\_roll\_arm 1 3.3379e-07 258

- kurtosis\_picth\_dumbbell 1 3.3379e-07 258

- var\_yaw\_arm 1 3.3379e-07 258

- min\_roll\_belt 1 3.3380e-07 258

- max\_roll\_belt 1 3.3380e-07 258

- magnet\_dumbbell\_y 1 3.3380e-07 258

- max\_picth\_belt 1 3.3380e-07 258

- amplitude\_roll\_belt 1 3.3380e-07 258

- kurtosis\_roll\_forearm 1 3.3382e-07 258

- var\_roll\_arm 1 3.3383e-07 258

- var\_roll\_forearm 1 3.3383e-07 258

- skewness\_roll\_forearm 1 3.3383e-07 258

- stddev\_roll\_belt 1 3.3383e-07 258

- max\_yaw\_forearm 1 3.3383e-07 258

- stddev\_roll\_forearm 1 3.3384e-07 258

- gyros\_dumbbell\_y 1 3.3384e-07 258

- skewness\_roll\_arm 1 3.3384e-07 258

- avg\_pitch\_forearm 1 3.3384e-07 258

- kurtosis\_picth\_forearm 1 3.3385e-07 258

- var\_pitch\_arm 1 3.3385e-07 258

- stddev\_yaw\_arm 1 3.3385e-07 258

- avg\_yaw\_dumbbell 1 3.3386e-07 258

- skewness\_pitch\_forearm 1 3.3387e-07 258

- skewness\_pitch\_dumbbell 1 3.3387e-07 258

- var\_yaw\_belt 1 3.3387e-07 258

- kurtosis\_picth\_belt 1 3.3387e-07 258

- var\_accel\_forearm 1 3.3387e-07 258

- skewness\_roll\_dumbbell 1 3.3388e-07 258

- amplitude\_pitch\_dumbbell 1 3.3388e-07 258

- max\_picth\_dumbbell 1 3.3388e-07 258

- min\_pitch\_dumbbell 1 3.3388e-07 258

- stddev\_roll\_arm 1 3.3389e-07 258

- stddev\_yaw\_belt 1 3.3389e-07 258

- avg\_roll\_arm 1 3.3389e-07 258

- skewness\_roll\_belt.1 1 3.3390e-07 258

- avg\_pitch\_arm 1 3.3390e-07 258

- var\_total\_accel\_belt 1 3.3391e-07 258

- magnet\_dumbbell\_z 1 3.3391e-07 258

- amplitude\_yaw\_forearm 1 3.3392e-07 258

- avg\_pitch\_dumbbell 1 3.3393e-07 258

- min\_pitch\_belt 1 3.3393e-07 258

- var\_accel\_dumbbell 1 3.3394e-07 258

- gyros\_belt\_x 1 3.3395e-07 258

- var\_pitch\_forearm 1 3.3398e-07 258

- max\_roll\_dumbbell 1 3.3398e-07 258

- min\_roll\_dumbbell 1 3.3399e-07 258

- amplitude\_roll\_dumbbell 1 3.3399e-07 258

- avg\_yaw\_forearm 1 3.3401e-07 258

- var\_roll\_dumbbell 1 3.3402e-07 258

- skewness\_pitch\_arm 1 3.3403e-07 258

- avg\_yaw\_arm 1 3.3403e-07 258

- avg\_roll\_forearm 1 3.3406e-07 258

- max\_yaw\_arm 1 3.3406e-07 258

- max\_picth\_arm 1 3.3407e-07 258

- stddev\_pitch\_forearm 1 3.3408e-07 258

- new\_window 1 3.3409e-07 258

- skewness\_roll\_belt 1 3.3409e-07 258

- var\_yaw\_forearm 1 3.3411e-07 258

- var\_pitch\_belt 1 3.3411e-07 258

- max\_roll\_forearm 1 3.3413e-07 258

- min\_roll\_forearm 1 3.3414e-07 258

- amplitude\_roll\_forearm 1 3.3414e-07 258

- stddev\_yaw\_forearm 1 3.3414e-07 258

- kurtosis\_roll\_belt 1 3.3415e-07 258

- max\_yaw\_belt 1 3.3415e-07 258

- yaw\_arm 1 3.3416e-07 258

- kurtosis\_roll\_arm 1 3.3417e-07 258

- min\_pitch\_forearm 1 3.3418e-07 258

- min\_yaw\_arm 1 3.3422e-07 258

- accel\_belt\_z 1 3.3424e-07 258

- var\_accel\_arm 1 3.3428e-07 258

- avg\_pitch\_belt 1 3.3453e-07 258

- gyros\_dumbbell\_x 1 3.3471e-07 258

- accel\_belt\_x 1 3.3509e-07 258

- total\_accel\_arm 1 3.3524e-07 258

- gyros\_dumbbell\_z 1 3.3530e-07 258

- magnet\_dumbbell\_x 1 3.3541e-07 258

- stddev\_pitch\_arm 1 3.3547e-07 258

- stddev\_pitch\_belt 1 3.3549e-07 258

- gyros\_belt\_z 1 3.3563e-07 258

- magnet\_belt\_y 1 3.3570e-07 258

- gyros\_arm\_x 1 3.3585e-07 258

- roll\_belt 1 3.3586e-07 258

- magnet\_forearm\_y 1 3.3586e-07 258

- gyros\_forearm\_x 1 3.3588e-07 258

- yaw\_forearm 1 3.3597e-07 258

- yaw\_dumbbell 1 3.3603e-07 258

- gyros\_arm\_y 1 3.3613e-07 258

- roll\_arm 1 3.3617e-07 258

- magnet\_arm\_z 1 3.3636e-07 258

- accel\_dumbbell\_z 1 3.3657e-07 258

- accel\_dumbbell\_y 1 3.3694e-07 258

- magnet\_arm\_x 1 3.3712e-07 258

- total\_accel\_forearm 1 3.3731e-07 258

- user\_name 1 3.3765e-07 258

- gyros\_arm\_z 1 3.3821e-07 258

- total\_accel\_belt 1 3.3869e-07 258

- magnet\_belt\_x 1 3.3892e-07 258

- pitch\_belt 1 3.3915e-07 258

- cvtd\_timestamp 1 3.3924e-07 258

- accel\_belt\_y 1 3.3943e-07 258

- roll\_dumbbell 1 3.4201e-07 258

- accel\_forearm\_x 1 3.4216e-07 258

- gyros\_belt\_y 1 3.4219e-07 258

- raw\_timestamp\_part\_2 1 3.4240e-07 258

- raw\_timestamp\_part\_1 1 3.4240e-07 258

- accel\_dumbbell\_x 1 3.4246e-07 258

- magnet\_belt\_z 1 3.4263e-07 258

- accel\_forearm\_y 1 3.4266e-07 258

- gyros\_forearm\_y 1 3.4305e-07 258

- pitch\_dumbbell 1 3.4307e-07 258

- accel\_forearm\_z 1 3.4398e-07 258

- accel\_arm\_x 1 3.4427e-07 258

- pitch\_forearm 1 3.4765e-07 258

- gyros\_forearm\_z 1 3.4805e-07 258

- accel\_arm\_z 1 3.5001e-07 258

- magnet\_forearm\_x 1 3.5694e-07 258

- magnet\_forearm\_z 1 3.6192e-07 258

- total\_accel\_dumbbell 1 3.6268e-07 258

- magnet\_arm\_y 1 3.7419e-07 258

- accel\_arm\_y 1 3.8292e-07 258

- pitch\_arm 1 4.1239e-07 258

- num\_window 1 6.0791e-07 258

<none> 3.3377e-07 260

Step: AIC=258

classe ~ user\_name + raw\_timestamp\_part\_1 + raw\_timestamp\_part\_2 +

cvtd\_timestamp + new\_window + num\_window + roll\_belt + pitch\_belt +

total\_accel\_belt + kurtosis\_roll\_belt + kurtosis\_picth\_belt +

skewness\_roll\_belt + skewness\_roll\_belt.1 + max\_roll\_belt +

max\_picth\_belt + max\_yaw\_belt + min\_roll\_belt + min\_pitch\_belt +

amplitude\_roll\_belt + var\_total\_accel\_belt + stddev\_roll\_belt +

var\_roll\_belt + avg\_pitch\_belt + stddev\_pitch\_belt + var\_pitch\_belt +

stddev\_yaw\_belt + var\_yaw\_belt + gyros\_belt\_x + gyros\_belt\_y +

gyros\_belt\_z + accel\_belt\_x + accel\_belt\_y + accel\_belt\_z +

magnet\_belt\_x + magnet\_belt\_y + magnet\_belt\_z + roll\_arm +

pitch\_arm + yaw\_arm + total\_accel\_arm + var\_accel\_arm + avg\_roll\_arm +

stddev\_roll\_arm + var\_roll\_arm + avg\_pitch\_arm + stddev\_pitch\_arm +

var\_pitch\_arm + avg\_yaw\_arm + stddev\_yaw\_arm + var\_yaw\_arm +

gyros\_arm\_x + gyros\_arm\_y + gyros\_arm\_z + accel\_arm\_x + accel\_arm\_y +

accel\_arm\_z + magnet\_arm\_x + magnet\_arm\_y + magnet\_arm\_z +

kurtosis\_roll\_arm + skewness\_roll\_arm + skewness\_pitch\_arm +

max\_roll\_arm + max\_picth\_arm + max\_yaw\_arm + min\_roll\_arm +

min\_yaw\_arm + amplitude\_roll\_arm + roll\_dumbbell + pitch\_dumbbell +

yaw\_dumbbell + kurtosis\_picth\_dumbbell + skewness\_roll\_dumbbell +

skewness\_pitch\_dumbbell + max\_roll\_dumbbell + max\_picth\_dumbbell +

max\_yaw\_dumbbell + min\_roll\_dumbbell + min\_pitch\_dumbbell +

amplitude\_roll\_dumbbell + amplitude\_pitch\_dumbbell + total\_accel\_dumbbell

+

var\_accel\_dumbbell + var\_roll\_dumbbell + avg\_pitch\_dumbbell +

avg\_yaw\_dumbbell + stddev\_yaw\_dumbbell + gyros\_dumbbell\_x +

gyros\_dumbbell\_y + gyros\_dumbbell\_z + accel\_dumbbell\_x +

accel\_dumbbell\_y + accel\_dumbbell\_z + magnet\_dumbbell\_x +

magnet\_dumbbell\_y + magnet\_dumbbell\_z + pitch\_forearm + yaw\_forearm +

kurtosis\_roll\_forearm + kurtosis\_picth\_forearm + skewness\_roll\_forearm +

skewness\_pitch\_forearm + max\_roll\_forearm + max\_yaw\_forearm +

min\_roll\_forearm + min\_pitch\_forearm + amplitude\_roll\_forearm +

amplitude\_yaw\_forearm + total\_accel\_forearm + var\_accel\_forearm +

avg\_roll\_forearm + stddev\_roll\_forearm + var\_roll\_forearm +

avg\_pitch\_forearm + stddev\_pitch\_forearm + var\_pitch\_forearm +

avg\_yaw\_forearm + stddev\_yaw\_forearm + var\_yaw\_forearm +

gyros\_forearm\_x + gyros\_forearm\_y + gyros\_forearm\_z + accel\_forearm\_x +

accel\_forearm\_y + accel\_forearm\_z + magnet\_forearm\_x + magnet\_forearm\_y +

magnet\_forearm\_z

Df Deviance AIC

- stddev\_yaw\_dumbbell 1 3.3376e-07 256

- var\_roll\_belt 1 3.3377e-07 256

- max\_yaw\_dumbbell 1 3.3378e-07 256

- kurtosis\_picth\_dumbbell 1 3.3378e-07 256

- max\_picth\_belt 1 3.3378e-07 256

- min\_roll\_belt 1 3.3378e-07 256

- max\_roll\_belt 1 3.3378e-07 256

- var\_yaw\_arm 1 3.3379e-07 256

- amplitude\_roll\_arm 1 3.3379e-07 256

- amplitude\_roll\_belt 1 3.3379e-07 256

- min\_roll\_arm 1 3.3379e-07 256

- max\_roll\_arm 1 3.3379e-07 256

- magnet\_dumbbell\_y 1 3.3380e-07 256

- var\_roll\_arm 1 3.3381e-07 256

- var\_roll\_forearm 1 3.3381e-07 256

- stddev\_roll\_forearm 1 3.3381e-07 256

- kurtosis\_roll\_forearm 1 3.3381e-07 256

- var\_pitch\_arm 1 3.3382e-07 256

- max\_yaw\_forearm 1 3.3382e-07 256

- gyros\_dumbbell\_y 1 3.3384e-07 256

- skewness\_roll\_forearm 1 3.3384e-07 256

- skewness\_roll\_arm 1 3.3384e-07 256

- stddev\_yaw\_arm 1 3.3384e-07 256

- avg\_pitch\_forearm 1 3.3384e-07 256

- kurtosis\_picth\_forearm 1 3.3384e-07 256

- stddev\_roll\_belt 1 3.3384e-07 256

- skewness\_roll\_dumbbell 1 3.3386e-07 256

- avg\_yaw\_dumbbell 1 3.3386e-07 256

- var\_yaw\_belt 1 3.3387e-07 256

- kurtosis\_picth\_belt 1 3.3387e-07 256

- avg\_pitch\_arm 1 3.3388e-07 256

- stddev\_roll\_arm 1 3.3388e-07 256

- skewness\_pitch\_forearm 1 3.3389e-07 256

- skewness\_pitch\_dumbbell 1 3.3389e-07 256

- var\_total\_accel\_belt 1 3.3390e-07 256

- var\_accel\_forearm 1 3.3390e-07 256

- skewness\_roll\_belt.1 1 3.3390e-07 256

- amplitude\_yaw\_forearm 1 3.3391e-07 256

- magnet\_dumbbell\_z 1 3.3391e-07 256

- stddev\_yaw\_belt 1 3.3391e-07 256

- min\_roll\_dumbbell 1 3.3391e-07 256

- min\_pitch\_belt 1 3.3392e-07 256

- amplitude\_roll\_dumbbell 1 3.3393e-07 256

- avg\_pitch\_dumbbell 1 3.3393e-07 256

- gyros\_belt\_x 1 3.3394e-07 256

- max\_roll\_dumbbell 1 3.3394e-07 256

- var\_accel\_dumbbell 1 3.3395e-07 256

- avg\_pitch\_belt 1 3.3397e-07 256

- var\_pitch\_forearm 1 3.3400e-07 256

- skewness\_pitch\_arm 1 3.3400e-07 256

- avg\_yaw\_forearm 1 3.3400e-07 256

- var\_roll\_dumbbell 1 3.3401e-07 256

- stddev\_pitch\_belt 1 3.3401e-07 256

- avg\_yaw\_arm 1 3.3402e-07 256

- max\_yaw\_arm 1 3.3405e-07 256

- avg\_roll\_forearm 1 3.3406e-07 256

- stddev\_pitch\_forearm 1 3.3407e-07 256

- var\_pitch\_belt 1 3.3407e-07 256

- skewness\_roll\_belt 1 3.3408e-07 256

- max\_picth\_arm 1 3.3409e-07 256

- amplitude\_pitch\_dumbbell 1 3.3409e-07 256

- new\_window 1 3.3409e-07 256

- max\_yaw\_belt 1 3.3410e-07 256

- kurtosis\_roll\_belt 1 3.3411e-07 256

- var\_yaw\_forearm 1 3.3411e-07 256

- max\_roll\_forearm 1 3.3412e-07 256

- min\_roll\_forearm 1 3.3413e-07 256

- amplitude\_roll\_forearm 1 3.3413e-07 256

- min\_pitch\_dumbbell 1 3.3415e-07 256

- yaw\_arm 1 3.3415e-07 256

- stddev\_yaw\_forearm 1 3.3415e-07 256

- max\_picth\_dumbbell 1 3.3417e-07 256

- min\_pitch\_forearm 1 3.3420e-07 256

- min\_yaw\_arm 1 3.3421e-07 256

- accel\_belt\_z 1 3.3423e-07 256

- avg\_roll\_arm 1 3.3425e-07 256

- kurtosis\_roll\_arm 1 3.3425e-07 256

- var\_accel\_arm 1 3.3428e-07 256

- gyros\_dumbbell\_x 1 3.3472e-07 256

- accel\_belt\_x 1 3.3509e-07 256

- total\_accel\_arm 1 3.3523e-07 256

- gyros\_dumbbell\_z 1 3.3529e-07 256

- magnet\_dumbbell\_x 1 3.3540e-07 256

- gyros\_belt\_z 1 3.3560e-07 256

- magnet\_belt\_y 1 3.3570e-07 256

- gyros\_arm\_x 1 3.3582e-07 256

- magnet\_forearm\_y 1 3.3586e-07 256

- gyros\_forearm\_x 1 3.3588e-07 256

- yaw\_forearm 1 3.3596e-07 256

- roll\_belt 1 3.3601e-07 256

- yaw\_dumbbell 1 3.3603e-07 256

- gyros\_arm\_y 1 3.3610e-07 256

- roll\_arm 1 3.3611e-07 256

- magnet\_arm\_z 1 3.3635e-07 256

- accel\_dumbbell\_z 1 3.3658e-07 256

- accel\_dumbbell\_y 1 3.3696e-07 256

- magnet\_arm\_x 1 3.3708e-07 256

- total\_accel\_forearm 1 3.3730e-07 256

- gyros\_arm\_z 1 3.3817e-07 256

- user\_name 1 3.3821e-07 256

- total\_accel\_belt 1 3.3869e-07 256

- magnet\_belt\_x 1 3.3893e-07 256

- pitch\_belt 1 3.3915e-07 256

- cvtd\_timestamp 1 3.3925e-07 256

- accel\_belt\_y 1 3.3943e-07 256

- total\_accel\_dumbbell 1 3.4020e-07 256

- gyros\_belt\_y 1 3.4197e-07 256

- roll\_dumbbell 1 3.4205e-07 256

- accel\_forearm\_x 1 3.4217e-07 256

- raw\_timestamp\_part\_1 1 3.4239e-07 256

- raw\_timestamp\_part\_2 1 3.4243e-07 256

- accel\_forearm\_y 1 3.4262e-07 256

- magnet\_belt\_z 1 3.4267e-07 256

- gyros\_forearm\_y 1 3.4308e-07 256

- pitch\_dumbbell 1 3.4380e-07 256

- accel\_forearm\_z 1 3.4397e-07 256

- accel\_dumbbell\_x 1 3.4423e-07 256

- accel\_arm\_x 1 3.4439e-07 256

- gyros\_forearm\_z 1 3.4805e-07 256

- pitch\_forearm 1 3.4954e-07 256

- accel\_arm\_z 1 3.4995e-07 256

- magnet\_forearm\_x 1 3.5694e-07 256

- magnet\_forearm\_z 1 3.6193e-07 256

- accel\_arm\_y 1 3.9011e-07 256

- magnet\_arm\_y 1 3.9308e-07 256

- pitch\_arm 1 4.1239e-07 256

- num\_window 1 6.0799e-07 256

- stddev\_pitch\_arm 1 1.2338e-06 256

<none> 3.3376e-07 258

Step: AIC=256

classe ~ user\_name + raw\_timestamp\_part\_1 + raw\_timestamp\_part\_2 +

cvtd\_timestamp + new\_window + num\_window + roll\_belt + pitch\_belt +

total\_accel\_belt + kurtosis\_roll\_belt + kurtosis\_picth\_belt +

skewness\_roll\_belt + skewness\_roll\_belt.1 + max\_roll\_belt +

max\_picth\_belt + max\_yaw\_belt + min\_roll\_belt + min\_pitch\_belt +

amplitude\_roll\_belt + var\_total\_accel\_belt + stddev\_roll\_belt +

var\_roll\_belt + avg\_pitch\_belt + stddev\_pitch\_belt + var\_pitch\_belt +

stddev\_yaw\_belt + var\_yaw\_belt + gyros\_belt\_x + gyros\_belt\_y +

gyros\_belt\_z + accel\_belt\_x + accel\_belt\_y + accel\_belt\_z +

magnet\_belt\_x + magnet\_belt\_y + magnet\_belt\_z + roll\_arm +

pitch\_arm + yaw\_arm + total\_accel\_arm + var\_accel\_arm + avg\_roll\_arm +

stddev\_roll\_arm + var\_roll\_arm + avg\_pitch\_arm + stddev\_pitch\_arm +

var\_pitch\_arm + avg\_yaw\_arm + stddev\_yaw\_arm + var\_yaw\_arm +

gyros\_arm\_x + gyros\_arm\_y + gyros\_arm\_z + accel\_arm\_x + accel\_arm\_y +

accel\_arm\_z + magnet\_arm\_x + magnet\_arm\_y + magnet\_arm\_z +

kurtosis\_roll\_arm + skewness\_roll\_arm + skewness\_pitch\_arm +

max\_roll\_arm + max\_picth\_arm + max\_yaw\_arm + min\_roll\_arm +

min\_yaw\_arm + amplitude\_roll\_arm + roll\_dumbbell + pitch\_dumbbell +

yaw\_dumbbell + kurtosis\_picth\_dumbbell + skewness\_roll\_dumbbell +

skewness\_pitch\_dumbbell + max\_roll\_dumbbell + max\_picth\_dumbbell +

max\_yaw\_dumbbell + min\_roll\_dumbbell + min\_pitch\_dumbbell +

amplitude\_roll\_dumbbell + amplitude\_pitch\_dumbbell + total\_accel\_dumbbell

+

var\_accel\_dumbbell + var\_roll\_dumbbell + avg\_pitch\_dumbbell +

avg\_yaw\_dumbbell + gyros\_dumbbell\_x + gyros\_dumbbell\_y +

gyros\_dumbbell\_z + accel\_dumbbell\_x + accel\_dumbbell\_y +

accel\_dumbbell\_z + magnet\_dumbbell\_x + magnet\_dumbbell\_y +

magnet\_dumbbell\_z + pitch\_forearm + yaw\_forearm + kurtosis\_roll\_forearm +

kurtosis\_picth\_forearm + skewness\_roll\_forearm + skewness\_pitch\_forearm +

max\_roll\_forearm + max\_yaw\_forearm + min\_roll\_forearm + min\_pitch\_forearm

+

amplitude\_roll\_forearm + amplitude\_yaw\_forearm + total\_accel\_forearm +

var\_accel\_forearm + avg\_roll\_forearm + stddev\_roll\_forearm +

var\_roll\_forearm + avg\_pitch\_forearm + stddev\_pitch\_forearm +

var\_pitch\_forearm + avg\_yaw\_forearm + stddev\_yaw\_forearm +

var\_yaw\_forearm + gyros\_forearm\_x + gyros\_forearm\_y + gyros\_forearm\_z +

accel\_forearm\_x + accel\_forearm\_y + accel\_forearm\_z + magnet\_forearm\_x +

magnet\_forearm\_y + magnet\_forearm\_z

Df Deviance AIC

- var\_roll\_belt 1 3.3377e-07 254

- kurtosis\_picth\_dumbbell 1 3.3378e-07 254

- max\_yaw\_dumbbell 1 3.3378e-07 254

- min\_roll\_belt 1 3.3378e-07 254

- max\_roll\_belt 1 3.3378e-07 254

- var\_yaw\_arm 1 3.3379e-07 254

- max\_picth\_belt 1 3.3379e-07 254

- amplitude\_roll\_belt 1 3.3380e-07 254

- magnet\_dumbbell\_y 1 3.3380e-07 254

- amplitude\_roll\_arm 1 3.3380e-07 254

- var\_roll\_forearm 1 3.3380e-07 254

- min\_roll\_arm 1 3.3380e-07 254

- stddev\_roll\_forearm 1 3.3380e-07 254

- max\_roll\_arm 1 3.3380e-07 254

- var\_roll\_arm 1 3.3382e-07 254

- var\_pitch\_arm 1 3.3383e-07 254

- gyros\_dumbbell\_y 1 3.3383e-07 254

- skewness\_roll\_arm 1 3.3384e-07 254

- stddev\_yaw\_arm 1 3.3385e-07 254

- avg\_pitch\_forearm 1 3.3385e-07 254

- skewness\_roll\_forearm 1 3.3385e-07 254

- kurtosis\_picth\_forearm 1 3.3386e-07 254

- stddev\_roll\_belt 1 3.3386e-07 254

- skewness\_pitch\_forearm 1 3.3386e-07 254

- var\_yaw\_belt 1 3.3387e-07 254

- avg\_roll\_arm 1 3.3388e-07 254

- skewness\_roll\_belt.1 1 3.3388e-07 254

- avg\_pitch\_arm 1 3.3388e-07 254

- kurtosis\_roll\_forearm 1 3.3389e-07 254

- stddev\_roll\_arm 1 3.3389e-07 254

- skewness\_roll\_dumbbell 1 3.3389e-07 254

- skewness\_pitch\_dumbbell 1 3.3389e-07 254

- var\_accel\_forearm 1 3.3390e-07 254

- magnet\_dumbbell\_z 1 3.3390e-07 254

- max\_yaw\_forearm 1 3.3391e-07 254

- kurtosis\_picth\_belt 1 3.3392e-07 254

- amplitude\_yaw\_forearm 1 3.3392e-07 254

- min\_pitch\_dumbbell 1 3.3393e-07 254

- amplitude\_pitch\_dumbbell 1 3.3393e-07 254

- max\_picth\_dumbbell 1 3.3393e-07 254

- avg\_yaw\_dumbbell 1 3.3393e-07 254

- gyros\_belt\_x 1 3.3393e-07 254

- var\_total\_accel\_belt 1 3.3393e-07 254

- min\_roll\_dumbbell 1 3.3394e-07 254

- amplitude\_roll\_dumbbell 1 3.3394e-07 254

- max\_roll\_dumbbell 1 3.3394e-07 254

- var\_accel\_dumbbell 1 3.3396e-07 254

- stddev\_pitch\_arm 1 3.3397e-07 254

- min\_pitch\_belt 1 3.3397e-07 254

- avg\_pitch\_dumbbell 1 3.3399e-07 254

- stddev\_yaw\_belt 1 3.3400e-07 254

- avg\_pitch\_belt 1 3.3402e-07 254

- var\_roll\_dumbbell 1 3.3402e-07 254

- var\_pitch\_forearm 1 3.3402e-07 254

- skewness\_pitch\_arm 1 3.3405e-07 254

- max\_yaw\_arm 1 3.3405e-07 254

- avg\_yaw\_forearm 1 3.3407e-07 254

- stddev\_pitch\_forearm 1 3.3412e-07 254

- max\_roll\_forearm 1 3.3413e-07 254

- min\_roll\_forearm 1 3.3413e-07 254

- amplitude\_roll\_forearm 1 3.3413e-07 254

- avg\_yaw\_arm 1 3.3414e-07 254

- max\_yaw\_belt 1 3.3414e-07 254

- avg\_roll\_forearm 1 3.3414e-07 254

- min\_pitch\_forearm 1 3.3414e-07 254

- kurtosis\_roll\_belt 1 3.3414e-07 254

- yaw\_arm 1 3.3414e-07 254

- var\_pitch\_belt 1 3.3414e-07 254

- var\_yaw\_forearm 1 3.3416e-07 254

- stddev\_yaw\_forearm 1 3.3417e-07 254

- max\_picth\_arm 1 3.3418e-07 254

- skewness\_roll\_belt 1 3.3422e-07 254

- accel\_belt\_z 1 3.3423e-07 254

- min\_yaw\_arm 1 3.3423e-07 254

- new\_window 1 3.3425e-07 254

- kurtosis\_roll\_arm 1 3.3427e-07 254

- var\_accel\_arm 1 3.3433e-07 254

- stddev\_pitch\_belt 1 3.3443e-07 254

- gyros\_dumbbell\_x 1 3.3472e-07 254

- accel\_belt\_x 1 3.3509e-07 254

- total\_accel\_arm 1 3.3524e-07 254

- gyros\_dumbbell\_z 1 3.3532e-07 254

- magnet\_dumbbell\_x 1 3.3545e-07 254

- gyros\_belt\_z 1 3.3560e-07 254

- magnet\_belt\_y 1 3.3570e-07 254

- gyros\_arm\_x 1 3.3581e-07 254

- magnet\_forearm\_y 1 3.3585e-07 254

- gyros\_forearm\_x 1 3.3587e-07 254

- yaw\_forearm 1 3.3596e-07 254

- yaw\_dumbbell 1 3.3603e-07 254

- roll\_arm 1 3.3608e-07 254

- gyros\_arm\_y 1 3.3610e-07 254

- magnet\_arm\_z 1 3.3636e-07 254

- accel\_dumbbell\_z 1 3.3658e-07 254

- accel\_dumbbell\_y 1 3.3695e-07 254

- magnet\_arm\_x 1 3.3707e-07 254

- user\_name 1 3.3767e-07 254

- roll\_belt 1 3.3777e-07 254

- gyros\_arm\_z 1 3.3820e-07 254

- total\_accel\_belt 1 3.3867e-07 254

- magnet\_belt\_x 1 3.3896e-07 254

- pitch\_belt 1 3.3916e-07 254

- cvtd\_timestamp 1 3.3924e-07 254

- accel\_belt\_y 1 3.3944e-07 254

- total\_accel\_dumbbell 1 3.4024e-07 254

- gyros\_belt\_y 1 3.4195e-07 254

- roll\_dumbbell 1 3.4205e-07 254

- accel\_forearm\_x 1 3.4219e-07 254

- accel\_dumbbell\_x 1 3.4226e-07 254

- raw\_timestamp\_part\_1 1 3.4241e-07 254

- accel\_forearm\_y 1 3.4260e-07 254

- magnet\_belt\_z 1 3.4264e-07 254

- pitch\_dumbbell 1 3.4309e-07 254

- gyros\_forearm\_y 1 3.4310e-07 254

- pitch\_forearm 1 3.4348e-07 254

- raw\_timestamp\_part\_2 1 3.4379e-07 254

- accel\_forearm\_z 1 3.4398e-07 254

- accel\_arm\_x 1 3.4427e-07 254

- gyros\_forearm\_z 1 3.4805e-07 254

- accel\_arm\_z 1 3.4996e-07 254

- magnet\_forearm\_x 1 3.5692e-07 254

- magnet\_forearm\_z 1 3.6194e-07 254

- total\_accel\_forearm 1 3.7087e-07 254

- accel\_arm\_y 1 3.8294e-07 254

- magnet\_arm\_y 1 3.9430e-07 254

- pitch\_arm 1 4.1238e-07 254

- num\_window 1 6.0798e-07 254

<none> 3.3376e-07 256

Step: AIC=254

classe ~ user\_name + raw\_timestamp\_part\_1 + raw\_timestamp\_part\_2 +

cvtd\_timestamp + new\_window + num\_window + roll\_belt + pitch\_belt +

total\_accel\_belt + kurtosis\_roll\_belt + kurtosis\_picth\_belt +

skewness\_roll\_belt + skewness\_roll\_belt.1 + max\_roll\_belt +

max\_picth\_belt + max\_yaw\_belt + min\_roll\_belt + min\_pitch\_belt +

amplitude\_roll\_belt + var\_total\_accel\_belt + stddev\_roll\_belt +

avg\_pitch\_belt + stddev\_pitch\_belt + var\_pitch\_belt + stddev\_yaw\_belt +

var\_yaw\_belt + gyros\_belt\_x + gyros\_belt\_y + gyros\_belt\_z +

accel\_belt\_x + accel\_belt\_y + accel\_belt\_z + magnet\_belt\_x +

magnet\_belt\_y + magnet\_belt\_z + roll\_arm + pitch\_arm + yaw\_arm +

total\_accel\_arm + var\_accel\_arm + avg\_roll\_arm + stddev\_roll\_arm +

var\_roll\_arm + avg\_pitch\_arm + stddev\_pitch\_arm + var\_pitch\_arm +

avg\_yaw\_arm + stddev\_yaw\_arm + var\_yaw\_arm + gyros\_arm\_x +

gyros\_arm\_y + gyros\_arm\_z + accel\_arm\_x + accel\_arm\_y + accel\_arm\_z +

magnet\_arm\_x + magnet\_arm\_y + magnet\_arm\_z + kurtosis\_roll\_arm +

skewness\_roll\_arm + skewness\_pitch\_arm + max\_roll\_arm + max\_picth\_arm +

max\_yaw\_arm + min\_roll\_arm + min\_yaw\_arm + amplitude\_roll\_arm +

roll\_dumbbell + pitch\_dumbbell + yaw\_dumbbell + kurtosis\_picth\_dumbbell +

skewness\_roll\_dumbbell + skewness\_pitch\_dumbbell + max\_roll\_dumbbell +

max\_picth\_dumbbell + max\_yaw\_dumbbell + min\_roll\_dumbbell +

min\_pitch\_dumbbell + amplitude\_roll\_dumbbell + amplitude\_pitch\_dumbbell +

total\_accel\_dumbbell + var\_accel\_dumbbell + var\_roll\_dumbbell +

avg\_pitch\_dumbbell + avg\_yaw\_dumbbell + gyros\_dumbbell\_x +

gyros\_dumbbell\_y + gyros\_dumbbell\_z + accel\_dumbbell\_x +

accel\_dumbbell\_y + accel\_dumbbell\_z + magnet\_dumbbell\_x +

magnet\_dumbbell\_y + magnet\_dumbbell\_z + pitch\_forearm + yaw\_forearm +

kurtosis\_roll\_forearm + kurtosis\_picth\_forearm + skewness\_roll\_forearm +

skewness\_pitch\_forearm + max\_roll\_forearm + max\_yaw\_forearm +

min\_roll\_forearm + min\_pitch\_forearm + amplitude\_roll\_forearm +

amplitude\_yaw\_forearm + total\_accel\_forearm + var\_accel\_forearm +

avg\_roll\_forearm + stddev\_roll\_forearm + var\_roll\_forearm +

avg\_pitch\_forearm + stddev\_pitch\_forearm + var\_pitch\_forearm +

avg\_yaw\_forearm + stddev\_yaw\_forearm + var\_yaw\_forearm +

gyros\_forearm\_x + gyros\_forearm\_y + gyros\_forearm\_z + accel\_forearm\_x +

accel\_forearm\_y + accel\_forearm\_z + magnet\_forearm\_x + magnet\_forearm\_y +

magnet\_forearm\_z

Df Deviance AIC

- max\_yaw\_dumbbell 1 3.3378e-07 252

- min\_roll\_belt 1 3.3379e-07 252

- max\_roll\_belt 1 3.3379e-07 252

- kurtosis\_picth\_dumbbell 1 3.3379e-07 252

- var\_yaw\_arm 1 3.3379e-07 252

- amplitude\_roll\_belt 1 3.3380e-07 252

- magnet\_dumbbell\_y 1 3.3380e-07 252

- var\_roll\_forearm 1 3.3380e-07 252

- stddev\_roll\_forearm 1 3.3380e-07 252

- amplitude\_roll\_arm 1 3.3381e-07 252

- min\_roll\_arm 1 3.3381e-07 252

- max\_roll\_arm 1 3.3381e-07 252

- var\_roll\_arm 1 3.3382e-07 252

- gyros\_dumbbell\_y 1 3.3384e-07 252

- var\_pitch\_arm 1 3.3384e-07 252

- skewness\_roll\_forearm 1 3.3384e-07 252

- avg\_pitch\_forearm 1 3.3385e-07 252

- skewness\_roll\_arm 1 3.3385e-07 252

- max\_picth\_belt 1 3.3386e-07 252

- stddev\_yaw\_arm 1 3.3386e-07 252

- var\_yaw\_belt 1 3.3387e-07 252

- skewness\_roll\_belt.1 1 3.3387e-07 252

- avg\_roll\_arm 1 3.3387e-07 252

- kurtosis\_roll\_forearm 1 3.3388e-07 252

- kurtosis\_picth\_forearm 1 3.3388e-07 252

- stddev\_roll\_arm 1 3.3389e-07 252

- var\_accel\_forearm 1 3.3390e-07 252

- skewness\_roll\_dumbbell 1 3.3390e-07 252

- skewness\_pitch\_dumbbell 1 3.3390e-07 252

- avg\_pitch\_arm 1 3.3390e-07 252

- max\_yaw\_forearm 1 3.3391e-07 252

- magnet\_dumbbell\_z 1 3.3391e-07 252

- skewness\_pitch\_forearm 1 3.3391e-07 252

- amplitude\_pitch\_dumbbell 1 3.3392e-07 252

- min\_pitch\_dumbbell 1 3.3392e-07 252

- max\_picth\_dumbbell 1 3.3392e-07 252

- amplitude\_yaw\_forearm 1 3.3393e-07 252

- avg\_yaw\_dumbbell 1 3.3393e-07 252

- min\_pitch\_belt 1 3.3394e-07 252

- gyros\_belt\_x 1 3.3394e-07 252

- min\_roll\_dumbbell 1 3.3395e-07 252

- amplitude\_roll\_dumbbell 1 3.3395e-07 252

- max\_roll\_dumbbell 1 3.3395e-07 252

- var\_accel\_dumbbell 1 3.3397e-07 252

- stddev\_yaw\_belt 1 3.3397e-07 252

- avg\_pitch\_dumbbell 1 3.3397e-07 252

- var\_total\_accel\_belt 1 3.3398e-07 252

- avg\_pitch\_belt 1 3.3403e-07 252

- var\_roll\_dumbbell 1 3.3403e-07 252

- skewness\_pitch\_arm 1 3.3405e-07 252

- max\_yaw\_arm 1 3.3405e-07 252

- stddev\_roll\_belt 1 3.3407e-07 252

- avg\_yaw\_forearm 1 3.3407e-07 252

- kurtosis\_picth\_belt 1 3.3408e-07 252

- stddev\_pitch\_arm 1 3.3410e-07 252

- var\_pitch\_forearm 1 3.3411e-07 252

- max\_roll\_forearm 1 3.3412e-07 252

- min\_roll\_forearm 1 3.3412e-07 252

- amplitude\_roll\_forearm 1 3.3413e-07 252

- yaw\_arm 1 3.3415e-07 252

- avg\_roll\_forearm 1 3.3415e-07 252

- avg\_yaw\_arm 1 3.3417e-07 252

- stddev\_pitch\_forearm 1 3.3418e-07 252

- var\_yaw\_forearm 1 3.3419e-07 252

- max\_picth\_arm 1 3.3420e-07 252

- stddev\_pitch\_belt 1 3.3423e-07 252

- accel\_belt\_z 1 3.3424e-07 252

- stddev\_yaw\_forearm 1 3.3425e-07 252

- min\_yaw\_arm 1 3.3425e-07 252

- new\_window 1 3.3426e-07 252

- min\_pitch\_forearm 1 3.3429e-07 252

- var\_pitch\_belt 1 3.3430e-07 252

- var\_accel\_arm 1 3.3447e-07 252

- kurtosis\_roll\_belt 1 3.3454e-07 252

- max\_yaw\_belt 1 3.3455e-07 252

- gyros\_dumbbell\_x 1 3.3472e-07 252

- accel\_belt\_x 1 3.3509e-07 252

- kurtosis\_roll\_arm 1 3.3520e-07 252

- total\_accel\_arm 1 3.3524e-07 252

- gyros\_dumbbell\_z 1 3.3531e-07 252

- magnet\_dumbbell\_x 1 3.3544e-07 252

- gyros\_belt\_z 1 3.3560e-07 252

- magnet\_belt\_y 1 3.3572e-07 252

- gyros\_arm\_x 1 3.3580e-07 252

- magnet\_forearm\_y 1 3.3585e-07 252

- gyros\_forearm\_x 1 3.3588e-07 252

- yaw\_forearm 1 3.3597e-07 252

- yaw\_dumbbell 1 3.3603e-07 252

- roll\_arm 1 3.3607e-07 252

- gyros\_arm\_y 1 3.3610e-07 252

- magnet\_arm\_z 1 3.3636e-07 252

- accel\_dumbbell\_z 1 3.3662e-07 252

- roll\_belt 1 3.3672e-07 252

- accel\_dumbbell\_y 1 3.3696e-07 252

- magnet\_arm\_x 1 3.3710e-07 252

- total\_accel\_forearm 1 3.3732e-07 252

- user\_name 1 3.3798e-07 252

- gyros\_arm\_z 1 3.3820e-07 252

- total\_accel\_belt 1 3.3868e-07 252

- magnet\_belt\_x 1 3.3906e-07 252

- pitch\_belt 1 3.3919e-07 252

- cvtd\_timestamp 1 3.3927e-07 252

- accel\_belt\_y 1 3.3944e-07 252

- gyros\_belt\_y 1 3.4196e-07 252

- roll\_dumbbell 1 3.4208e-07 252

- accel\_forearm\_x 1 3.4217e-07 252

- accel\_dumbbell\_x 1 3.4224e-07 252

- raw\_timestamp\_part\_1 1 3.4241e-07 252

- magnet\_belt\_z 1 3.4257e-07 252

- accel\_forearm\_y 1 3.4260e-07 252

- raw\_timestamp\_part\_2 1 3.4300e-07 252

- gyros\_forearm\_y 1 3.4307e-07 252

- pitch\_dumbbell 1 3.4310e-07 252

- pitch\_forearm 1 3.4350e-07 252

- accel\_forearm\_z 1 3.4398e-07 252

- accel\_arm\_x 1 3.4432e-07 252

- gyros\_forearm\_z 1 3.4805e-07 252

- total\_accel\_dumbbell 1 3.4933e-07 252

- accel\_arm\_z 1 3.4996e-07 252

- magnet\_forearm\_x 1 3.5693e-07 252

- magnet\_forearm\_z 1 3.6194e-07 252

- magnet\_arm\_y 1 3.7499e-07 252

- accel\_arm\_y 1 3.8297e-07 252

- pitch\_arm 1 4.1238e-07 252

- num\_window 1 6.0806e-07 252

- skewness\_roll\_belt 1 1.9739e-06 252

<none> 3.3377e-07 254

Step: AIC=252

classe ~ user\_name + raw\_timestamp\_part\_1 + raw\_timestamp\_part\_2 +

cvtd\_timestamp + new\_window + num\_window + roll\_belt + pitch\_belt +

total\_accel\_belt + kurtosis\_roll\_belt + kurtosis\_picth\_belt +

skewness\_roll\_belt + skewness\_roll\_belt.1 + max\_roll\_belt +

max\_picth\_belt + max\_yaw\_belt + min\_roll\_belt + min\_pitch\_belt +

amplitude\_roll\_belt + var\_total\_accel\_belt + stddev\_roll\_belt +

avg\_pitch\_belt + stddev\_pitch\_belt + var\_pitch\_belt + stddev\_yaw\_belt +

var\_yaw\_belt + gyros\_belt\_x + gyros\_belt\_y + gyros\_belt\_z +

accel\_belt\_x + accel\_belt\_y + accel\_belt\_z + magnet\_belt\_x +

magnet\_belt\_y + magnet\_belt\_z + roll\_arm + pitch\_arm + yaw\_arm +

total\_accel\_arm + var\_accel\_arm + avg\_roll\_arm + stddev\_roll\_arm +

var\_roll\_arm + avg\_pitch\_arm + stddev\_pitch\_arm + var\_pitch\_arm +

avg\_yaw\_arm + stddev\_yaw\_arm + var\_yaw\_arm + gyros\_arm\_x +

gyros\_arm\_y + gyros\_arm\_z + accel\_arm\_x + accel\_arm\_y + accel\_arm\_z +

magnet\_arm\_x + magnet\_arm\_y + magnet\_arm\_z + kurtosis\_roll\_arm +

skewness\_roll\_arm + skewness\_pitch\_arm + max\_roll\_arm + max\_picth\_arm +

max\_yaw\_arm + min\_roll\_arm + min\_yaw\_arm + amplitude\_roll\_arm +

roll\_dumbbell + pitch\_dumbbell + yaw\_dumbbell + kurtosis\_picth\_dumbbell +

skewness\_roll\_dumbbell + skewness\_pitch\_dumbbell + max\_roll\_dumbbell +

max\_picth\_dumbbell + min\_roll\_dumbbell + min\_pitch\_dumbbell +

amplitude\_roll\_dumbbell + amplitude\_pitch\_dumbbell + total\_accel\_dumbbell

+

var\_accel\_dumbbell + var\_roll\_dumbbell + avg\_pitch\_dumbbell +

avg\_yaw\_dumbbell + gyros\_dumbbell\_x + gyros\_dumbbell\_y +

gyros\_dumbbell\_z + accel\_dumbbell\_x + accel\_dumbbell\_y +

accel\_dumbbell\_z + magnet\_dumbbell\_x + magnet\_dumbbell\_y +

magnet\_dumbbell\_z + pitch\_forearm + yaw\_forearm + kurtosis\_roll\_forearm +

kurtosis\_picth\_forearm + skewness\_roll\_forearm + skewness\_pitch\_forearm +

max\_roll\_forearm + max\_yaw\_forearm + min\_roll\_forearm + min\_pitch\_forearm

+

amplitude\_roll\_forearm + amplitude\_yaw\_forearm + total\_accel\_forearm +

var\_accel\_forearm + avg\_roll\_forearm + stddev\_roll\_forearm +

var\_roll\_forearm + avg\_pitch\_forearm + stddev\_pitch\_forearm +

var\_pitch\_forearm + avg\_yaw\_forearm + stddev\_yaw\_forearm +

var\_yaw\_forearm + gyros\_forearm\_x + gyros\_forearm\_y + gyros\_forearm\_z +

accel\_forearm\_x + accel\_forearm\_y + accel\_forearm\_z + magnet\_forearm\_x +

magnet\_forearm\_y + magnet\_forearm\_z

Df Deviance AIC

- amplitude\_roll\_arm 1 3.3380e-07 248

- min\_roll\_arm 1 3.3380e-07 248

- max\_roll\_arm 1 3.3380e-07 248

- stddev\_roll\_forearm 1 3.3381e-07 248

- var\_roll\_forearm 1 3.3381e-07 248

- var\_yaw\_arm 1 3.3381e-07 248

- max\_picth\_belt 1 3.3381e-07 248

- magnet\_dumbbell\_y 1 3.3382e-07 248

- min\_roll\_belt 1 3.3382e-07 248

- var\_roll\_arm 1 3.3382e-07 248

- max\_roll\_belt 1 3.3382e-07 248

- amplitude\_roll\_belt 1 3.3384e-07 248

- var\_pitch\_arm 1 3.3384e-07 248

- gyros\_dumbbell\_y 1 3.3385e-07 248

- skewness\_roll\_belt.1 1 3.3386e-07 248

- skewness\_roll\_arm 1 3.3386e-07 248

- skewness\_roll\_forearm 1 3.3387e-07 248

- avg\_roll\_arm 1 3.3387e-07 248

- kurtosis\_roll\_forearm 1 3.3387e-07 248

- avg\_pitch\_forearm 1 3.3387e-07 248

- stddev\_yaw\_arm 1 3.3388e-07 248

- kurtosis\_picth\_forearm 1 3.3389e-07 248

- var\_yaw\_belt 1 3.3389e-07 248

- max\_yaw\_forearm 1 3.3390e-07 248

- stddev\_roll\_arm 1 3.3390e-07 248

- var\_accel\_forearm 1 3.3391e-07 248

- skewness\_roll\_dumbbell 1 3.3392e-07 248

- min\_pitch\_dumbbell 1 3.3392e-07 248

- amplitude\_pitch\_dumbbell 1 3.3392e-07 248

- max\_picth\_dumbbell 1 3.3393e-07 248

- min\_pitch\_belt 1 3.3393e-07 248

- magnet\_dumbbell\_z 1 3.3393e-07 248

- avg\_yaw\_dumbbell 1 3.3394e-07 248

- avg\_pitch\_arm 1 3.3394e-07 248

- min\_roll\_dumbbell 1 3.3394e-07 248

- amplitude\_roll\_dumbbell 1 3.3394e-07 248

- max\_roll\_dumbbell 1 3.3394e-07 248

- skewness\_pitch\_forearm 1 3.3394e-07 248

- amplitude\_yaw\_forearm 1 3.3394e-07 248

- var\_accel\_dumbbell 1 3.3395e-07 248

- gyros\_belt\_x 1 3.3396e-07 248

- stddev\_yaw\_belt 1 3.3396e-07 248

- skewness\_pitch\_dumbbell 1 3.3396e-07 248

- var\_total\_accel\_belt 1 3.3397e-07 248

- avg\_pitch\_dumbbell 1 3.3400e-07 248

- stddev\_pitch\_arm 1 3.3401e-07 248

- avg\_pitch\_belt 1 3.3403e-07 248

- avg\_yaw\_forearm 1 3.3408e-07 248

- kurtosis\_picth\_belt 1 3.3408e-07 248

- skewness\_pitch\_arm 1 3.3409e-07 248

- stddev\_roll\_belt 1 3.3412e-07 248

- var\_roll\_dumbbell 1 3.3412e-07 248

- min\_pitch\_forearm 1 3.3413e-07 248

- var\_pitch\_forearm 1 3.3414e-07 248

- avg\_roll\_forearm 1 3.3414e-07 248

- yaw\_arm 1 3.3417e-07 248

- avg\_yaw\_arm 1 3.3417e-07 248

- min\_roll\_forearm 1 3.3418e-07 248

- max\_yaw\_arm 1 3.3419e-07 248

- max\_roll\_forearm 1 3.3420e-07 248

- new\_window 1 3.3420e-07 248

- max\_yaw\_belt 1 3.3421e-07 248

- kurtosis\_roll\_belt 1 3.3421e-07 248

- var\_pitch\_belt 1 3.3422e-07 248

- stddev\_pitch\_belt 1 3.3423e-07 248

- amplitude\_roll\_forearm 1 3.3423e-07 248

- stddev\_pitch\_forearm 1 3.3424e-07 248

- max\_picth\_arm 1 3.3424e-07 248

- var\_yaw\_forearm 1 3.3425e-07 248

- accel\_belt\_z 1 3.3426e-07 248

- stddev\_yaw\_forearm 1 3.3428e-07 248

- skewness\_roll\_belt 1 3.3432e-07 248

- kurtosis\_roll\_arm 1 3.3434e-07 248

- min\_yaw\_arm 1 3.3438e-07 248

- var\_accel\_arm 1 3.3453e-07 248

- gyros\_dumbbell\_x 1 3.3474e-07 248

- accel\_belt\_x 1 3.3512e-07 248

- total\_accel\_arm 1 3.3525e-07 248

- gyros\_dumbbell\_z 1 3.3530e-07 248

- magnet\_dumbbell\_x 1 3.3540e-07 248

- gyros\_belt\_z 1 3.3561e-07 248

- magnet\_belt\_y 1 3.3573e-07 248

- roll\_belt 1 3.3581e-07 248

- magnet\_forearm\_y 1 3.3585e-07 248

- gyros\_forearm\_x 1 3.3588e-07 248

- gyros\_arm\_x 1 3.3589e-07 248

- yaw\_forearm 1 3.3601e-07 248

- yaw\_dumbbell 1 3.3602e-07 248

- roll\_arm 1 3.3609e-07 248

- gyros\_arm\_y 1 3.3619e-07 248

- magnet\_arm\_z 1 3.3642e-07 248

- accel\_dumbbell\_z 1 3.3663e-07 248

- accel\_dumbbell\_y 1 3.3698e-07 248

- magnet\_arm\_x 1 3.3714e-07 248

- total\_accel\_forearm 1 3.3727e-07 248

- user\_name 1 3.3772e-07 248

- gyros\_arm\_z 1 3.3821e-07 248

- total\_accel\_belt 1 3.3870e-07 248

- magnet\_belt\_x 1 3.3896e-07 248

- pitch\_belt 1 3.3919e-07 248

- cvtd\_timestamp 1 3.3927e-07 248

- accel\_belt\_y 1 3.3948e-07 248

- total\_accel\_dumbbell 1 3.4021e-07 248

- gyros\_belt\_y 1 3.4198e-07 248

- roll\_dumbbell 1 3.4208e-07 248

- accel\_forearm\_x 1 3.4220e-07 248

- accel\_dumbbell\_x 1 3.4223e-07 248

- raw\_timestamp\_part\_2 1 3.4232e-07 248

- raw\_timestamp\_part\_1 1 3.4246e-07 248

- magnet\_belt\_z 1 3.4258e-07 248

- accel\_forearm\_y 1 3.4265e-07 248

- gyros\_forearm\_y 1 3.4308e-07 248

- pitch\_dumbbell 1 3.4311e-07 248

- pitch\_forearm 1 3.4351e-07 248

- accel\_forearm\_z 1 3.4399e-07 248

- accel\_arm\_x 1 3.4435e-07 248

- gyros\_forearm\_z 1 3.4805e-07 248

- accel\_arm\_z 1 3.5002e-07 248

- magnet\_forearm\_x 1 3.5695e-07 248

- magnet\_forearm\_z 1 3.6193e-07 248

- magnet\_arm\_y 1 3.7427e-07 248

- accel\_arm\_y 1 3.8296e-07 248

- pitch\_arm 1 4.1250e-07 248

- num\_window 1 6.0839e-07 248

<none> 3.3379e-07 250

Step: AIC=248

classe ~ user\_name + raw\_timestamp\_part\_1 + raw\_timestamp\_part\_2 +

cvtd\_timestamp + new\_window + num\_window + roll\_belt + pitch\_belt +

total\_accel\_belt + kurtosis\_roll\_belt + kurtosis\_picth\_belt +

skewness\_roll\_belt + skewness\_roll\_belt.1 + max\_roll\_belt +

max\_picth\_belt + max\_yaw\_belt + min\_roll\_belt + min\_pitch\_belt +

amplitude\_roll\_belt + var\_total\_accel\_belt + stddev\_roll\_belt +

avg\_pitch\_belt + stddev\_pitch\_belt + var\_pitch\_belt + stddev\_yaw\_belt +

var\_yaw\_belt + gyros\_belt\_x + gyros\_belt\_y + gyros\_belt\_z +

accel\_belt\_x + accel\_belt\_y + accel\_belt\_z + magnet\_belt\_x +

magnet\_belt\_y + magnet\_belt\_z + roll\_arm + pitch\_arm + yaw\_arm +

total\_accel\_arm + var\_accel\_arm + avg\_roll\_arm + stddev\_roll\_arm +

var\_roll\_arm + avg\_pitch\_arm + stddev\_pitch\_arm + var\_pitch\_arm +

avg\_yaw\_arm + stddev\_yaw\_arm + var\_yaw\_arm + gyros\_arm\_x +

gyros\_arm\_y + gyros\_arm\_z + accel\_arm\_x + accel\_arm\_y + accel\_arm\_z +

magnet\_arm\_x + magnet\_arm\_y + magnet\_arm\_z + kurtosis\_roll\_arm +

skewness\_roll\_arm + skewness\_pitch\_arm + max\_roll\_arm + max\_picth\_arm +

max\_yaw\_arm + min\_roll\_arm + min\_yaw\_arm + roll\_dumbbell +

pitch\_dumbbell + yaw\_dumbbell + skewness\_roll\_dumbbell +

skewness\_pitch\_dumbbell + max\_roll\_dumbbell + max\_picth\_dumbbell +

min\_roll\_dumbbell + min\_pitch\_dumbbell + amplitude\_roll\_dumbbell +

amplitude\_pitch\_dumbbell + total\_accel\_dumbbell + var\_accel\_dumbbell +

var\_roll\_dumbbell + avg\_pitch\_dumbbell + avg\_yaw\_dumbbell +

gyros\_dumbbell\_x + gyros\_dumbbell\_y + gyros\_dumbbell\_z +

accel\_dumbbell\_x + accel\_dumbbell\_y + accel\_dumbbell\_z +

magnet\_dumbbell\_x + magnet\_dumbbell\_y + magnet\_dumbbell\_z +

pitch\_forearm + yaw\_forearm + kurtosis\_roll\_forearm + kurtosis\_picth\_fore

arm +

skewness\_roll\_forearm + skewness\_pitch\_forearm + max\_roll\_forearm +

max\_yaw\_forearm + min\_roll\_forearm + min\_pitch\_forearm +

amplitude\_roll\_forearm + amplitude\_yaw\_forearm + total\_accel\_forearm +

var\_accel\_forearm + avg\_roll\_forearm + stddev\_roll\_forearm +

var\_roll\_forearm + avg\_pitch\_forearm + stddev\_pitch\_forearm +

var\_pitch\_forearm + avg\_yaw\_forearm + stddev\_yaw\_forearm +

var\_yaw\_forearm + gyros\_forearm\_x + gyros\_forearm\_y + gyros\_forearm\_z +

accel\_forearm\_x + accel\_forearm\_y + accel\_forearm\_z + magnet\_forearm\_x +

magnet\_forearm\_y + magnet\_forearm\_z

Df Deviance AIC

- var\_yaw\_arm 1 3.3380e-07 246

- max\_picth\_belt 1 3.3381e-07 246

- var\_roll\_forearm 1 3.3381e-07 246

- stddev\_roll\_forearm 1 3.3381e-07 246

- min\_roll\_belt 1 3.3381e-07 246

- max\_roll\_belt 1 3.3381e-07 246

- var\_roll\_arm 1 3.3382e-07 246

- amplitude\_roll\_belt 1 3.3383e-07 246

- var\_pitch\_arm 1 3.3384e-07 246

- magnet\_dumbbell\_y 1 3.3385e-07 246

- skewness\_roll\_arm 1 3.3386e-07 246

- avg\_roll\_arm 1 3.3386e-07 246

- skewness\_roll\_forearm 1 3.3387e-07 246

- kurtosis\_roll\_forearm 1 3.3387e-07 246

- avg\_pitch\_forearm 1 3.3388e-07 246

- gyros\_dumbbell\_y 1 3.3388e-07 246

- stddev\_yaw\_arm 1 3.3388e-07 246

- skewness\_roll\_belt.1 1 3.3389e-07 246

- var\_yaw\_belt 1 3.3389e-07 246

- var\_accel\_forearm 1 3.3389e-07 246

- stddev\_roll\_arm 1 3.3390e-07 246

- max\_yaw\_forearm 1 3.3391e-07 246

- kurtosis\_picth\_forearm 1 3.3391e-07 246

- min\_pitch\_belt 1 3.3392e-07 246

- amplitude\_pitch\_dumbbell 1 3.3392e-07 246

- min\_pitch\_dumbbell 1 3.3392e-07 246

- max\_picth\_dumbbell 1 3.3392e-07 246

- avg\_yaw\_dumbbell 1 3.3393e-07 246

- min\_roll\_dumbbell 1 3.3393e-07 246

- amplitude\_roll\_dumbbell 1 3.3393e-07 246

- max\_roll\_dumbbell 1 3.3393e-07 246

- skewness\_roll\_dumbbell 1 3.3393e-07 246

- amplitude\_yaw\_forearm 1 3.3393e-07 246

- magnet\_dumbbell\_z 1 3.3393e-07 246

- avg\_pitch\_arm 1 3.3394e-07 246

- var\_accel\_dumbbell 1 3.3394e-07 246

- stddev\_yaw\_belt 1 3.3395e-07 246

- gyros\_belt\_x 1 3.3397e-07 246

- skewness\_pitch\_forearm 1 3.3397e-07 246

- skewness\_pitch\_dumbbell 1 3.3397e-07 246

- var\_total\_accel\_belt 1 3.3399e-07 246

- min\_roll\_arm 1 3.3400e-07 246

- avg\_pitch\_dumbbell 1 3.3402e-07 246

- stddev\_pitch\_arm 1 3.3402e-07 246

- avg\_pitch\_belt 1 3.3402e-07 246

- skewness\_pitch\_arm 1 3.3409e-07 246

- kurtosis\_picth\_belt 1 3.3411e-07 246

- stddev\_roll\_belt 1 3.3411e-07 246

- var\_roll\_dumbbell 1 3.3412e-07 246

- avg\_yaw\_forearm 1 3.3415e-07 246

- max\_roll\_forearm 1 3.3415e-07 246

- min\_roll\_forearm 1 3.3416e-07 246

- amplitude\_roll\_forearm 1 3.3416e-07 246

- min\_pitch\_forearm 1 3.3418e-07 246

- yaw\_arm 1 3.3418e-07 246

- max\_yaw\_arm 1 3.3419e-07 246

- max\_roll\_arm 1 3.3419e-07 246

- stddev\_pitch\_belt

1 3.3420e

-07 246

- avg\_yaw\_arm

1 3.3421e

-07 246

-

max\_yaw\_belt

1 3.3422e

-07 246

- avg\_roll\_forearm

1 3.3422e

-07 246

- kurtosis\_roll\_belt

1 3.3422e

-07 246

- accel\_belt\_z

1 3.3426e

-07 246

- max\_picth\_arm

1 3.3427e

-07 246

- var\_pitch\_forearm

1 3.3427e

-07 246

- new\_window

1 3.3428e

-07 246

- var\_pitch\_belt

1 3.3430e

-07 246

- var\_yaw\_forearm

1 3.3433e

-07 246

- kurtosis\_roll\_arm

1 3.3439e

-07 246

- stddev\_yaw\_forearm

1 3.3440e

-07 246

- min\_yaw\_arm

1 3.3441e

-07 246

- stddev\_pitch\_forearm

1 3.3442e

-07 246

- skewness\_roll\_belt

1 3.3442e

-07 246

- var\_accel\_arm

1 3.3457e

-07 246

- gyros\_dumbbell\_x

1 3.3474e

-07 246

- accel\_belt\_x

1 3.3514e

-07 246

- total\_accel\_arm

1 3.3525e

-07 246

- gyros\_dumbbell\_z

1 3.3535e

-07 246

- magnet\_dumbbell\_x

1 3.3548e

-07 246

- gyros\_belt\_z

1 3.3563e

-07 246

- magnet\_belt\_y

1 3.3574e

-07 246

- roll\_belt

1 3.3587e

-07 246

- gyros\_arm\_x

1 3.3587e

-07 246

- magnet\_forearm\_y

1 3.3589e

-07 246

- gyros\_forearm\_x

1 3.3593e

-07 246

- yaw\_forearm

1 3.3601e

-07 246

- yaw\_dumbbell

1 3.3602e

-07 246

- roll\_arm

1 3.3611e

-07 246

- gyros\_arm\_y

1 3.3618e

-07 246

- magnet\_arm\_z

1 3.3642e

-07 246

- accel\_dumbbell\_z

1 3.3663e

-07 246

- accel\_dumbbell\_y

1 3.3697e

-07 246

- magnet\_arm\_x

1 3.3715e

-07 246

- total\_accel\_forearm

1 3.3731e

-07 246

- user\_name

1 3.3773e

-07 246

- gyros\_arm\_z

1 3.3823e

-07 246

- total\_accel\_belt

1 3.3871e

-07 246

- magnet\_belt\_x

1 3.3897e

-07 246

- pitch\_belt

1 3.3920e

-07 246

- cvtd\_timestamp

1 3.3926e

-07 246

- accel\_belt\_y

1 3.3947e

-07 246

- total\_accel\_dumbbell

1 3.4023e

-07 246

- gyros\_belt\_y

1 3.4199e

-07 246

- roll\_dumbbell

1 3.4208e

-07 246

- accel\_forearm\_x

1 3.4221e

-07 246

- accel\_dumbbell\_x

1 3.4222e

-07 246

- raw\_timestamp\_part\_2

1 3.4235e

-07 246

- raw\_timestamp\_part\_1

1 3.4245e

-07 246

- magnet\_belt\_z

1 3.4262e

-07 246

- accel\_forearm\_y

1 3.4267e

-07 246

- gyros\_forearm\_y

1 3.4308e

-07 246

- pitch\_dumbbell

1 3.4308e

-07 246

- pitch\_forearm

1 3.4350e

-07 246

- accel\_forearm\_z

1 3.4399e

-07 246

- accel\_arm\_x 1 3.4436e-07 246

- gyros\_forearm\_z 1 3.4808e-07 246

- accel\_arm\_z 1 3.5002e-07 246

- magnet\_forearm\_x 1 3.5696e-07 246

- magnet\_forearm\_z 1 3.6196e-07 246

- magnet\_arm\_y 1 3.7426e-07 246

- accel\_arm\_y 1 3.8298e-07 246

- pitch\_arm 1 4.1251e-07 246

- num\_window 1 6.0839e-07 246

<none> 3.3380e-07 248

Step: AIC=246

classe ~ user\_name + raw\_timestamp\_part\_1 + raw\_timestamp\_part\_2 +

cvtd\_timestamp + new\_window + num\_window + roll\_belt + pitch\_belt +

total\_accel\_belt + kurtosis\_roll\_belt + kurtosis\_picth\_belt +

skewness\_roll\_belt + skewness\_roll\_belt.1 + max\_roll\_belt +

max\_picth\_belt + max\_yaw\_belt + min\_roll\_belt + min\_pitch\_belt +

amplitude\_roll\_belt + var\_total\_accel\_belt + stddev\_roll\_belt +

avg\_pitch\_belt + stddev\_pitch\_belt + var\_pitch\_belt + stddev\_yaw\_belt +

var\_yaw\_belt + gyros\_belt\_x + gyros\_belt\_y + gyros\_belt\_z +

accel\_belt\_x + accel\_belt\_y + accel\_belt\_z + magnet\_belt\_x +

magnet\_belt\_y + magnet\_belt\_z + roll\_arm + pitch\_arm + yaw\_arm +

total\_accel\_arm + var\_accel\_arm + avg\_roll\_arm + stddev\_roll\_arm +

var\_roll\_arm + avg\_pitch\_arm + stddev\_pitch\_arm + var\_pitch\_arm +

avg\_yaw\_arm + stddev\_yaw\_arm + gyros\_arm\_x + gyros\_arm\_y +

gyros\_arm\_z + accel\_arm\_x + accel\_arm\_y + accel\_arm\_z + magnet\_arm\_x +

magnet\_arm\_y + magnet\_arm\_z + kurtosis\_roll\_arm + skewness\_roll\_arm +

skewness\_pitch\_arm + max\_roll\_arm + max\_picth\_arm + max\_yaw\_arm +

min\_roll\_arm + min\_yaw\_arm + roll\_dumbbell + pitch\_dumbbell +

yaw\_dumbbell + skewness\_roll\_dumbbell + skewness\_pitch\_dumbbell +

max\_roll\_dumbbell + max\_picth\_dumbbell + min\_roll\_dumbbell +

min\_pitch\_dumbbell + amplitude\_roll\_dumbbell + amplitude\_pitch\_dumbbell +

total\_accel\_dumbbell + var\_accel\_dumbbell + var\_roll\_dumbbell +

avg\_pitch\_dumbbell + avg\_yaw\_dumbbell + gyros\_dumbbell\_x +

gyros\_dumbbell\_y + gyros\_dumbbell\_z + accel\_dumbbell\_x +

accel\_dumbbell\_y + accel\_dumbbell\_z + magnet\_dumbbell\_x +

magnet\_dumbbell\_y + magnet\_dumbbell\_z + pitch\_forearm + yaw\_forearm +

kurtosis\_roll\_forearm + kurtosis\_picth\_forearm + skewness\_roll\_forearm +

skewness\_pitch\_forearm + max\_roll\_forearm + max\_yaw\_forearm +

min\_roll\_forearm + min\_pitch\_forearm + amplitude\_roll\_forearm +

amplitude\_yaw\_forearm + total\_accel\_forearm + var\_accel\_forearm +

avg\_roll\_forearm + stddev\_roll\_forearm + var\_roll\_forearm +

avg\_pitch\_forearm + stddev\_pitch\_forearm + var\_pitch\_forearm +

avg\_yaw\_forearm + stddev\_yaw\_forearm + var\_yaw\_forearm +

gyros\_forearm\_x + gyros\_forearm\_y + gyros\_forearm\_z + accel\_forearm\_x +

accel\_forearm\_y + accel\_forearm\_z + magnet\_forearm\_x + magnet\_forearm\_y +

magnet\_forearm\_z

Df Deviance AIC

- max\_picth\_belt 1 3.3383e-07 244

- var\_roll\_forearm 1 3.3383e-07 244

- min\_roll\_belt 1 3.3384e-07 244

- max\_roll\_belt 1 3.3384e-07 244

- stddev\_roll\_forearm 1 3.3385e-07 244

- var\_pitch\_arm 1 3.3385e-07 244

- var\_roll\_arm 1 3.3386e-07 244

- magnet\_dumbbell\_y 1 3.3386e-07 244

- skewness\_roll\_arm 1 3.3386e-07 244

- skewness\_roll\_forearm 1 3.3387e-07 244

- kurtosis\_roll\_forearm 1 3.3387e-07 244

- amplitude\_roll\_belt 1 3.3387e-07 244

- avg\_pitch\_forearm 1 3.3388e-07 244

- gyros\_dumbbell\_y 1 3.3388e-07 244

- var\_yaw\_belt 1 3.3389e-07 244

- skewness\_roll\_belt.1 1 3.3390e-07 244

- kurtosis\_picth\_forearm 1 3.3390e-07 244

- avg\_roll\_arm 1 3.3391e-07 244

- min\_roll\_dumbbell 1 3.3392e-07 244

- amplitude\_roll\_dumbbell 1 3.3392e-07 244

- max\_roll\_dumbbell 1 3.3392e-07 244

- skewness\_roll\_dumbbell 1 3.3392e-07 244

- max\_yaw\_forearm 1 3.3392e-07 244

- amplitude\_pitch\_dumbbell 1 3.3392e-07 244

- min\_pitch\_dumbbell 1 3.3392e-07 244

- max\_picth\_dumbbell 1 3.3392e-07 244

- min\_pitch\_belt 1 3.3393e-07 244

- var\_accel\_forearm 1 3.3394e-07 244

- magnet\_dumbbell\_z 1 3.3394e-07 244

- avg\_pitch\_arm 1 3.3395e-07 244

- stddev\_yaw\_belt 1 3.3396e-07 244

- var\_accel\_dumbbell 1 3.3396e-07 244

- avg\_yaw\_dumbbell 1 3.3397e-07 244

- gyros\_belt\_x 1 3.3397e-07 244

- amplitude\_yaw\_forearm 1 3.3397e-07 244

- skewness\_pitch\_forearm 1 3.3398e-07 244

- stddev\_roll\_arm 1 3.3398e-07 244

- var\_total\_accel\_belt 1 3.3399e-07 244

- skewness\_pitch\_dumbbell 1 3.3400e-07 244

- avg\_pitch\_dumbbell 1 3.3402e-07 244

- avg\_pitch\_belt 1 3.3402e-07 244

- stddev\_pitch\_arm 1 3.3405e-07 244

- kurtosis\_picth\_belt 1 3.3406e-07 244

- stddev\_yaw\_arm 1 3.3408e-07 244

- skewness\_pitch\_arm 1 3.3410e-07 244

- stddev\_roll\_belt 1 3.3412e-07 244

- var\_roll\_dumbbell 1 3.3414e-07 244

- avg\_yaw\_forearm 1 3.3416e-07 244

- max\_roll\_forearm 1 3.3416e-07 244

- min\_roll\_forearm 1 3.3416e-07 244

- amplitude\_roll\_forearm 1 3.3417e-07 244

- stddev\_pitch\_belt 1 3.3417e-07 244

- yaw\_arm 1 3.3418e-07 244

- min\_roll\_arm 1 3.3419e-07 244

- max\_roll\_arm 1 3.3419e-07 244

- avg\_yaw\_arm 1 3.3422e-07 244

- avg\_roll\_forearm 1 3.3422e-07 244

- max\_yaw\_belt 1 3.3423e-07 244

- kurtosis\_roll\_belt 1 3.3424e-07 244

- min\_pitch\_forearm 1 3.3424e-07 244

- new\_window 1 3.3425e-07 244

- var\_pitch\_forearm 1 3.3426e-07 244

- accel\_belt\_z

1 3.3427e

-07 244

- max\_picth\_arm

1 3.3427e

-07 244

- var\_pitch\_belt

1 3.3431e

-07 244

- max\_yaw\_arm

1 3.3433e

-07 244

-

kurtosis\_roll\_arm

1 3.3440e

-07 244

- skewness\_roll\_belt

1 3.3443e

-07 244

- var\_accel\_arm

1 3.3453e

-07 244

- stddev\_pitch\_forearm

1 3.3454e

-07 244

- var\_yaw\_forearm

1 3.3462e

-07 244

- min\_yaw\_arm

1 3.3463e

-07 244

- stddev\_yaw\_forearm

1 3.3465e

-07 244

- gyros\_dumbbell\_x

1 3.3476e

-07 244

- accel\_belt\_x

1 3.3516e

-07 244

- total\_accel\_arm

1 3.3527e

-07 244

- gyros\_dumbbell\_z

1 3.3536e

-07 244

- magnet\_dumbbell\_x

1 3.3548e

-07 244

- gyros\_belt\_z

1 3.3563e

-07 244

- magnet\_belt\_y

1 3.3575e

-07 244

- roll\_belt

1 3.3581e

-07 244

- magnet\_forearm\_y

1 3.3590e

-07 244

- gyros\_arm\_x

1 3.3590e

-07 244

- gyros\_forearm\_x

1 3.3597e

-07 244

- yaw\_forearm

1 3.3601e

-07 244

- yaw\_dumbbell

1 3.3602e

-07 244

- roll\_arm

1 3.3615e

-07 244

- gyros\_arm\_y

1 3.3620e

-07 244

- magnet\_arm\_z

1 3.3647e

-07 244

- accel\_dumbbell\_z

1 3.3664e

-07 244

- accel\_dumbbell\_y

1 3.3697e

-07 244

- magnet\_arm\_x

1 3.3715e

-07 244

- total\_accel\_forearm

1 3.3736e

-07 244

- user\_name

1 3.3776e

-07 244

- gyros\_arm\_z

1 3.3824e

-07 244

- total\_accel\_belt

1 3.3871e

-07 244

- magnet\_belt\_x

1 3.3914e

-07 244

- pitch\_belt

1 3.3921e

-07 244

- cvtd\_timestamp

1 3.3928e

-07 244

- accel\_belt\_y

1 3.3948e

-07 244

- total\_accel\_dumbbell

1 3.4024e

-07 244

- gyros\_belt\_y

1 3.4207e

-07 244

- roll\_dumbbell

1 3.4209e

-07 244

- accel\_forearm\_x

1 3.4222e

-07 244

- accel\_dumbbell\_x

1 3.4223e

-07 244

- raw\_timestamp\_part\_2

1 3.4235e

-07 244

- raw\_timestamp\_part\_1

1 3.4250e

-07 244

- magnet\_belt\_z

1 3.4271e

-07 244

- accel\_forearm\_y

1 3.4273e

-07 244

- pitch\_dumbbell

1 3.4309e

-07 244

- gyros\_forearm\_y

1 3.4310e

-07 244

- pitch\_forear

m

1 3.4360e

-07 244

- accel\_forearm\_z

1 3.4402e

-07 244

- accel\_arm\_x

1 3.4436e

-07 244

- gyros\_forearm\_z

1 3.4808e

-07 244

- accel\_arm\_z

1 3.5017e

-07 244

- magnet\_forearm\_x

1 3.5700e

-07 244

- magnet\_forearm\_z

1 3.6198e

-07 244

- magnet\_arm\_y

1 3.7471e

-07 244

- accel\_arm\_y 1 3.8299e-07 244

- pitch\_arm 1 4.1268e-07 244

- num\_window 1 6.0849e-07 244

<none> 3.3380e-07 246

Step: AIC=244

classe ~ user\_name + raw\_timestamp\_part\_1 + raw\_timestamp\_part\_2 +

cvtd\_timestamp + new\_window + num\_window + roll\_belt + pitch\_belt +

total\_accel\_belt + kurtosis\_roll\_belt + kurtosis\_picth\_belt +

skewness\_roll\_belt + skewness\_roll\_belt.1 + max\_roll\_belt +

max\_yaw\_belt + min\_roll\_belt + min\_pitch\_belt + amplitude\_roll\_belt +

var\_total\_accel\_belt + stddev\_roll\_belt + avg\_pitch\_belt +

stddev\_pitch\_belt + var\_pitch\_belt + stddev\_yaw\_belt + var\_yaw\_belt +

gyros\_belt\_x + gyros\_belt\_y + gyros\_belt\_z + accel\_belt\_x +

accel\_belt\_y + accel\_belt\_z + magnet\_belt\_x + magnet\_belt\_y +

magnet\_belt\_z + roll\_arm + pitch\_arm + yaw\_arm + total\_accel\_arm +

var\_accel\_arm + avg\_roll\_arm + stddev\_roll\_arm + var\_roll\_arm +

avg\_pitch\_arm + stddev\_pitch\_arm + var\_pitch\_arm + avg\_yaw\_arm +

stddev\_yaw\_arm + gyros\_arm\_x + gyros\_arm\_y + gyros\_arm\_z +

accel\_arm\_x + accel\_arm\_y + accel\_arm\_z + magnet\_arm\_x +

magnet\_arm\_y + magnet\_arm\_z + kurtosis\_roll\_arm + skewness\_roll\_arm +

skewness\_pitch\_arm + max\_roll\_arm + max\_picth\_arm + max\_yaw\_arm +

min\_roll\_arm + min\_yaw\_arm + roll\_dumbbell + pitch\_dumbbell +

yaw\_dumbbell + skewness\_roll\_dumbbell + skewness\_pitch\_dumbbell +

max\_roll\_dumbbell + max\_picth\_dumbbell + min\_roll\_dumbbell +

min\_pitch\_dumbbell + amplitude\_roll\_dumbbell + amplitude\_pitch\_dumbbell +

total\_accel\_dumbbell + var\_accel\_dumbbell + var\_roll\_dumbbell +

avg\_pitch\_dumbbell + avg\_yaw\_dumbbell + gyros\_dumbbell\_x +

gyros\_dumbbell\_y + gyros\_dumbbell\_z + accel\_dumbbell\_x +

accel\_dumbbell\_y + accel\_dumbbell\_z + magnet\_dumbbell\_x +

magnet\_dumbbell\_y + magnet\_dumbbell\_z + pitch\_forearm + yaw\_forearm +

kurtosis\_roll\_forearm + kurtosis\_picth\_forearm + skewness\_roll\_forearm +

skewness\_pitch\_forearm + max\_roll\_forearm + max\_yaw\_forearm +

min\_roll\_forearm + min\_pitch\_forearm + amplitude\_roll\_forearm +

amplitude\_yaw\_forearm + total\_accel\_forearm + var\_accel\_forearm +

avg\_roll\_forearm + stddev\_roll\_forearm + var\_roll\_forearm +

avg\_pitch\_forearm + stddev\_pitch\_forearm + var\_pitch\_forearm +

avg\_yaw\_forearm + stddev\_yaw\_forearm + var\_yaw\_forearm +

gyros\_forearm\_x + gyros\_forearm\_y + gyros\_forearm\_z + accel\_forearm\_x +

accel\_forearm\_y + accel\_forearm\_z + magnet\_forearm\_x + magnet\_forearm\_y +

magnet\_forearm\_z

Df Deviance AIC

- skewness\_roll\_arm 1 3.3383e-07 242

- var\_roll\_forearm 1 3.3384e-07 242

- min\_roll\_belt 1 3.3386e-07 242

- stddev\_roll\_forearm 1 3.3386e-07 242

- kurtosis\_roll\_forearm 1 3.3386e-07 242

- max\_roll\_belt 1 3.3386e-07 242

- skewness\_roll\_forearm 1 3.3387e-07 242

- amplitude\_roll\_belt 1 3.3387e-07 242

- avg\_roll\_arm 1 3.3388e-07 242

- avg\_pitch\_forearm 1 3.3388e-07 242

- magnet\_dumbbell\_y 1 3.3388e-07 242

- var\_roll\_arm 1 3.3389e-07 242

- var\_pitch\_arm 1 3.3389e-07 242

- var\_yaw\_belt 1 3.3390e-07 242

- skewness\_roll\_belt.1 1 3.3391e-07 242

- kurtosis\_picth\_forearm 1 3.3391e-07 242

- max\_yaw\_forearm 1 3.3391e-07 242

- skewness\_roll\_dumbbell 1 3.3391e-07 242

- gyros\_dumbbell\_y 1 3.3392e-07 242

- avg\_pitch\_arm 1 3.3393e-07 242

- var\_accel\_forearm 1 3.3393e-07 242

- min\_roll\_dumbbell 1 3.3393e-07 242

- amplitude\_roll\_dumbbell 1 3.3394e-07 242

- max\_roll\_dumbbell 1 3.3394e-07 242

- stddev\_yaw\_belt 1 3.3394e-07 242

- amplitude\_yaw\_forearm 1 3.3394e-07 242

- var\_accel\_dumbbell 1 3.3395e-07 242

- avg\_yaw\_dumbbell 1 3.3395e-07 242

- amplitude\_pitch\_dumbbell 1 3.3396e-07 242

- min\_pitch\_dumbbell 1 3.3396e-07 242

- max\_picth\_dumbbell 1 3.3396e-07 242

- magnet\_dumbbell\_z 1 3.3396e-07 242

- skewness\_pitch\_forearm 1 3.3397e-07 242

- gyros\_belt\_x 1 3.3399e-07 242

- avg\_pitch\_dumbbell 1 3.3400e-07 242

- skewness\_pitch\_dumbbell 1 3.3400e-07 242

- stddev\_roll\_arm 1 3.3403e-07 242

- stddev\_pitch\_arm 1 3.3404e-07 242

- avg\_pitch\_belt 1 3.3404e-07 242

- stddev\_yaw\_arm 1 3.3406e-07 242

- kurtosis\_picth\_belt 1 3.3406e-07 242

- skewness\_pitch\_arm 1 3.3408e-07 242

- max\_roll\_forearm 1 3.3414e-07 242

- min\_roll\_forearm 1 3.3414e-07 242

- stddev\_roll\_belt 1 3.3414e-07 242

- amplitude\_roll\_forearm 1 3.3415e-07 242

- avg\_yaw\_forearm 1 3.3415e-07 242

- var\_roll\_dumbbell 1 3.3416e-07 242

- yaw\_arm 1 3.3418e-07 242

- min\_pitch\_forearm 1 3.3420e-07 242

- avg\_yaw\_arm 1 3.3421e-07 242

- avg\_roll\_forearm 1 3.3422e-07 242

- min\_pitch\_belt 1 3.3423e-07 242

- min\_roll\_arm 1 3.3423e-07 242

- max\_roll\_arm 1 3.3425e-07 242

- stddev\_pitch\_belt 1 3.3425e-07 242

- max\_yaw\_belt 1 3.3426e-07 242

- max\_picth\_arm 1 3.3426e-07 242

- kurtosis\_roll\_belt 1 3.3427e-07 242

- accel\_belt\_z 1 3.3427e-07 242

- max\_yaw\_arm 1 3.3428e-07 242

- var\_pitch\_forearm 1 3.3430e-07 242

- var\_pitch\_belt 1 3.3440e-07 242

- kurtosis\_roll\_arm 1 3.3448e-07 242

- skewness\_roll\_belt 1 3.3449e-07 242

- var\_yaw\_forearm 1 3.3455e-07 242

- var\_accel\_arm 1 3.3459e-07 242

- min\_yaw\_arm 1 3.3463e-07 242

- stddev\_pitch\_forearm 1 3.3466e-07 242

- stddev\_yaw\_forearm 1 3.3474e-07 242

- gyros\_dumbbell\_x 1 3.3477e-07 242

- var\_total\_accel\_belt 1 3.3487e-07 242

- accel\_belt\_x 1 3.3520e-07 242

- total\_accel\_arm 1 3.3528e-07 242

- gyros\_dumbbell\_z 1 3.3535e-07 242

- magnet\_dumbbell\_x 1 3.3547e-07 242

- gyros\_belt\_z 1 3.3562e-07 242

- magnet\_belt\_y 1 3.3575e-07 242

- roll\_belt 1 3.3585e-07 242

- magnet\_forearm\_y 1 3.3592e-07 242

- gyros\_arm\_x 1 3.3595e-07 242

- gyros\_forearm\_x 1 3.3595e-07 242

- yaw\_forearm 1 3.3602e-07 242

- yaw\_dumbbell 1 3.3602e-07 242

- roll\_arm 1 3.3616e-07 242

- gyros\_arm\_y 1 3.3625e-07 242

- magnet\_arm\_z 1 3.3648e-07 242

- accel\_dumbbell\_z 1 3.3662e-07 242

- accel\_dumbbell\_y 1 3.3697e-07 242

- magnet\_arm\_x 1 3.3718e-07 242

- total\_accel\_forearm 1 3.3733e-07 242

- user\_name 1 3.3778e-07 242

- gyros\_arm\_z 1 3.3824e-07 242

- total\_accel\_belt 1 3.3875e-07 242

- magnet\_belt\_x 1 3.3899e-07 242

- cvtd\_timestamp 1 3.3928e-07 242

- pitch\_belt 1 3.3928e-07 242

- accel\_belt\_y 1 3.3951e-07 242

- total\_accel\_dumbbell 1 3.4024e-07 242

- gyros\_belt\_y 1 3.4208e-07 242

- roll\_dumbbell 1 3.4209e-07 242

- accel\_dumbbell\_x 1 3.4222e-07 242

- accel\_forearm\_x 1 3.4223e-07 242

- raw\_timestamp\_part\_2 1 3.4232e-07 242

- raw\_timestamp\_part\_1 1 3.4248e-07 242

- magnet\_belt\_z 1 3.4266e-07 242

- accel\_forearm\_y 1 3.4270e-07 242

- pitch\_dumbbell 1 3.4308e-07 242

- gyros\_forearm\_y 1 3.4311e-07 242

- pitch\_forearm 1 3.4360e-07 242

- accel\_forearm\_z 1 3.4403e-07 242

- accel\_arm\_x 1 3.4441e-07 242

- gyros\_forearm\_z 1 3.4809e-07 242

- accel\_arm\_z 1 3.5023e-07 242

- magnet\_forearm\_x 1 3.5703e-07 242

- magnet\_forearm\_z 1 3.6206e-07 242

- magnet\_arm\_y 1 3.7435e-07 242

- accel\_arm\_y 1 3.8299e-07 242

- pitch\_arm 1 4.1270e-07 242

- num\_window 1 6.0866e-07 242

- new\_window 1 1.4420e-06 242

<none> 3.3383e-07 244

Step: AIC=242

classe ~ user\_name + raw\_timestamp\_part\_1 + raw\_timestamp\_part\_2 +

cvtd\_timestamp + new\_window + num\_window + roll\_belt + pitch\_belt +

total\_accel\_belt + kurtosis\_roll\_belt + kurtosis\_picth\_belt +

skewness\_roll\_belt + skewness\_roll\_belt.1 + max\_roll\_belt +

max\_yaw\_belt + min\_roll\_belt + min\_pitch\_belt + amplitude\_roll\_belt +

var\_total\_accel\_belt + stddev\_roll\_belt + avg\_pitch\_belt +

stddev\_pitch\_belt + var\_pitch\_belt + stddev\_yaw\_belt + var\_yaw\_belt +

gyros\_belt\_x + gyros\_belt\_y + gyros\_belt\_z + accel\_belt\_x +

accel\_belt\_y + accel\_belt\_z + magnet\_belt\_x + magnet\_belt\_y +

magnet\_belt\_z + roll\_arm + pitch\_arm + yaw\_arm + total\_accel\_arm +

var\_accel\_arm + avg\_roll\_arm + stddev\_roll\_arm + var\_roll\_arm +

avg\_pitch\_arm + stddev\_pitch\_arm + var\_pitch\_arm + avg\_yaw\_arm +

stddev\_yaw\_arm + gyros\_arm\_x + gyros\_arm\_y + gyros\_arm\_z +

accel\_arm\_x + accel\_arm\_y + accel\_arm\_z + magnet\_arm\_x +

magnet\_arm\_y + magnet\_arm\_z + kurtosis\_roll\_arm + skewness\_pitch\_arm +

max\_roll\_arm + max\_picth\_arm + max\_yaw\_arm + min\_roll\_arm +

min\_yaw\_arm + roll\_dumbbell + pitch\_dumbbell + yaw\_dumbbell +

skewness\_roll\_dumbbell + skewness\_pitch\_dumbbell + max\_roll\_dumbbell +

max\_picth\_dumbbell + min\_roll\_dumbbell + min\_pitch\_dumbbell +

amplitude\_roll\_dumbbell + amplitude\_pitch\_dumbbell + total\_accel\_dumbbell

+

var\_accel\_dumbbell + var\_roll\_dumbbell + avg\_pitch\_dumbbell +

avg\_yaw\_dumbbell + gyros\_dumbbell\_x + gyros\_dumbbell\_y +

gyros\_dumbbell\_z + accel\_dumbbell\_x + accel\_dumbbell\_y +

accel\_dumbbell\_z + magnet\_dumbbell\_x + magnet\_dumbbell\_y +

magnet\_dumbbell\_z + pitch\_forearm + yaw\_forearm + kurtosis\_roll\_forearm +

kurtosis\_picth\_forearm + skewness\_roll\_forearm + skewness\_pitch\_forearm +

max\_roll\_forearm + max\_yaw\_forearm + min\_roll\_forearm + min\_pitch\_forearm

+

amplitude\_roll\_forearm + amplitude\_yaw\_forearm + total\_accel\_forearm +

var\_accel\_forearm + avg\_roll\_forearm + stddev\_roll\_forearm +

var\_roll\_forearm + avg\_pitch\_forearm + stddev\_pitch\_forearm +

var\_pitch\_forearm + avg\_yaw\_forearm + stddev\_yaw\_forearm +

var\_yaw\_forearm + gyros\_forearm\_x + gyros\_forearm\_y + gyros\_forearm\_z +

accel\_forearm\_x + accel\_forearm\_y + accel\_forearm\_z + magnet\_forearm\_x +

magnet\_forearm\_y + magnet\_forearm\_z

- avg\_yaw\_arm 1 3.3496e-07 204

- max\_yaw\_arm 1 3.3498e-07 204

- max\_picth\_arm 1 3.3499e-07 204

- var\_pitch\_belt 1 3.3500e-07 204

- accel\_belt\_z 1 3.3516e-07 204

- var\_accel\_arm 1 3.3521e-07 204

- kurtosis\_roll\_arm 1 3.3524e-07 204

- min\_yaw\_arm 1 3.3525e-07 204

- stddev\_pitch\_forearm 1 3.3525e-07 204

- stddev\_yaw\_forearm 1 3.3555e-07 204

- var\_yaw\_forearm 1 3.3557e-07 204

- max\_roll\_arm 1 3.3575e-07 204

- gyros\_dumbbell\_z 1 3.3577e-07 204

- magnet\_belt\_y 1 3.3583e-07 204

- total\_accel\_arm 1 3.3589e-07 204

- accel\_belt\_x 1 3.3600e-07 204

- magnet\_forearm\_y 1 3.3610e-07 204

- gyros\_arm\_x 1 3.3615e-07 204

- gyros\_forearm\_x 1 3.3621e-07 204

- roll\_arm 1 3.3650e-07 204

- yaw\_forearm 1 3.3658e-07 204

- gyros\_belt\_z 1 3.3672e-07 204

- gyros\_arm\_y 1 3.3689e-07 204

- accel\_dumbbell\_z 1 3.3690e-07 204

- yaw\_dumbbell 1 3.3722e-07 204

- magnet\_arm\_z 1 3.3741e-07 204

- total\_accel\_forearm 1 3.3745e-07 204

- magnet\_arm\_x 1 3.3747e-07 204

- accel\_dumbbell\_y 1 3.3757e-07 204

- roll\_belt 1 3.3777e-07 204

- magnet\_dumbbell\_x 1 3.3842e-07 204

- gyros\_arm\_z 1 3.3953e-07 204

- accel\_belt\_y 1 3.3989e-07 204

- total\_accel\_dumbbell 1 3.4023e-07 204

- cvtd\_timestamp 1 3.4053e-07 204

- user\_name 1 3.4072e-07 204

- raw\_timestamp\_part\_2 1 3.4193e-07 204

- total\_accel\_belt 1 3.4210e-07 204

- magnet\_belt\_x 1 3.4226e-07 204

- roll\_dumbbell 1 3.4258e-07 204

- pitch\_belt 1 3.4261e-07 204

- accel\_dumbbell\_x 1 3.4273e-07 204

- accel\_forearm\_x 1 3.4276e-07 204

- gyros\_forearm\_y 1 3.4348e-07 204

- accel\_forearm\_y 1 3.4385e-07 204

- gyros\_belt\_y 1 3.4398e-07 204

- accel\_forearm\_z 1 3.4417e-07 204

- pitch\_dumbbell 1 3.4476e-07 204

- pitch\_forearm 1 3.4482e-07 204

- accel\_arm\_x 1 3.4484e-07 204

- raw\_timestamp\_part\_1 1 3.4636e-07 204

- magnet\_belt\_z 1 3.4647e-07 204

- gyros\_forearm\_z 1 3.4904e-07 204

- accel\_arm\_z 1 3.5204e-07 204

- magnet\_forearm\_x 1 3.5843e-07 204

- magnet\_forearm\_z 1 3.6666e-07 204

- accel\_arm\_y 1 3.8791e-07 204

- pitch\_arm 1 4.1427e-07 204

- num\_window 1 6.2104e-07 204

- magnet\_arm\_y 1 2.2439e-06 204

<none> 3.3438e-07 206

Step: AIC=204

classe ~ user\_name + raw\_timestamp\_part\_1 + raw\_timestamp\_part\_2 +

cvtd\_timestamp + new\_window + num\_window + roll\_belt + pitch\_belt +

total\_accel\_belt + kurtosis\_roll\_belt + kurtosis\_picth\_belt +

skewness\_roll\_belt + max\_roll\_belt + max\_yaw\_belt + min\_pitch\_belt +

amplitude\_roll\_belt + var\_total\_accel\_belt + stddev\_roll\_belt +

avg\_pitch\_belt + stddev\_pitch\_belt + var\_pitch\_belt + stddev\_yaw\_belt +

var\_yaw\_belt + gyros\_belt\_x + gyros\_belt\_y + gyros\_belt\_z +

accel\_belt\_x + accel\_belt\_y + accel\_belt\_z + magnet\_belt\_x +

magnet\_belt\_y + magnet\_belt\_z + roll\_arm + pitch\_arm + yaw\_arm +

total\_accel\_arm + var\_accel\_arm + avg\_roll\_arm + stddev\_roll\_arm +

avg\_yaw\_arm + stddev\_yaw\_arm + gyros\_arm\_x + gyros\_arm\_y +

gyros\_arm\_z + accel\_arm\_x + accel\_arm\_y + accel\_arm\_z + magnet\_arm\_x +

magnet\_arm\_y + magnet\_arm\_z + kurtosis\_roll\_arm + max\_roll\_arm +

max\_picth\_arm + max\_yaw\_arm + min\_roll\_arm + min\_yaw\_arm +

roll\_dumbbell + pitch\_dumbbell + yaw\_dumbbell + skewness\_pitch\_dumbbell +

max\_roll\_dumbbell + max\_picth\_dumbbell + min\_pitch\_dumbbell +

amplitude\_roll\_dumbbell + amplitude\_pitch\_dumbbell + total\_accel\_dumbbell

+

var\_accel\_dumbbell + var\_roll\_dumbbell + avg\_pitch\_dumbbell +

gyros\_dumbbell\_x + gyros\_dumbbell\_z + accel\_dumbbell\_x +

accel\_dumbbell\_y + accel\_dumbbell\_z + magnet\_dumbbell\_x +

magnet\_dumbbell\_z + pitch\_forearm + yaw\_forearm + kurtosis\_picth\_forearm

+

skewness\_pitch\_forearm + max\_roll\_forearm + max\_yaw\_forearm +

min\_roll\_forearm + min\_pitch\_forearm + amplitude\_roll\_forearm +

total\_accel\_forearm + avg\_roll\_forearm + stddev\_pitch\_forearm +

var\_pitch\_forearm + avg\_yaw\_forearm + stddev\_yaw\_forearm +

var\_yaw\_forearm + gyros\_forearm\_x + gyros\_forearm\_y + gyros\_forearm\_z +

accel\_forearm\_x + accel\_forearm\_y + accel\_forearm\_z + magnet\_forearm\_x +

magnet\_forearm\_y + magnet\_forearm\_z

Df Deviance AIC

- var\_accel\_dumbbell 1 3.3445e-07 202

- avg\_pitch\_belt 1 3.3446e-07 202

- min\_roll\_forearm 1 3.3448e-07 202

- max\_roll\_forearm 1 3.3448e-07 202

- kurtosis\_picth\_belt 1 3.3448e-07 202

- amplitude\_roll\_forearm 1 3.3448e-07 202

- avg\_yaw\_forearm 1 3.3449e-07 202

- max\_yaw\_forearm 1 3.3449e-07 202

- kurtosis\_picth\_forearm 1 3.3450e-07 202

- new\_window 1 3.3450e-07 202

- stddev\_roll\_belt 1 3.3451e-07 202

- skewness\_pitch\_forearm 1 3.3454e-07 202

- min\_pitch\_belt 1 3.3455e-07 202

- magnet\_dumbbell\_z 1 3.3457e-07 202

- max\_roll\_belt 1 3.3457e-07 202

- amplitude\_roll\_belt 1 3.3457e-07 202

- amplitude\_roll\_dumbbell 1 3.3458e-07 202

- yaw\_arm 1 3.3459e-07 202

- stddev\_yaw\_belt 1 3.3460e-07 202

- amplitude\_pitch\_dumbbell 1 3.3462e-07 202

- max\_picth\_dumbbell 1 3.3462e-07 202

- min\_pitch\_dumbbell 1 3.3462e-07 202

- max\_yaw\_belt 1 3.3463e-07 202

- kurtosis\_roll\_belt 1 3.3464e-07 202

- stddev\_roll\_arm 1 3.3465e-07 202

- var\_total\_accel\_belt 1 3.3466e-07 202

- var\_yaw\_belt 1 3.3466e-07 202

- avg\_pitch\_dumbbell 1 3.3467e-07 202

- min\_pitch\_forearm 1 3.3468e-07 202

- var\_pitch\_forearm 1 3.3468e-07 202

- var\_roll\_dumbbell 1 3.3470e-07 202

- avg\_roll\_arm 1 3.3471e-07 202

- avg\_roll\_forearm 1 3.3474e-07 202

- gyros\_belt\_x 1 3.3476e-07 202

- skewness\_pitch\_dumbbell 1 3.3477e-07 202

- stddev\_yaw\_arm 1 3.3477e-07 202

- stddev\_pitch\_belt 1 3.3479e-07 202

- max\_roll\_dumbbell 1 3.3485e-07 202

- skewness\_roll\_belt 1 3.3488e-07 202

- min\_roll\_arm 1 3.3495e-07 202

- avg\_yaw\_arm 1 3.3497e-07 202

- gyros\_dumbbell\_x

1 3.3500e

-07 202

- var\_pitch\_belt

1 3.3500e

-07 202

- max\_picth\_arm

1

3.3501e

-07 202

- max\_yaw\_arm

1 3.3501e

-07 202

- kurtosis\_roll\_arm

1 3.3512e

-07 202

- accel\_belt\_z

1 3.3517e

-07 202

- min\_yaw\_arm

1 3.3526e

-07 202

- var\_accel\_arm

1 3.3526e

-07 202

- stddev\_pitch\_forearm

1 3.3535e

-07 202

- stddev\_yaw\_forearm

1 3.3553e

-07 202

- var\_yaw\_forearm

1 3.3559e

-07 202

- gyros\_dumbbell\_z

1 3.3580e

-07 202

- max\_roll\_arm

1 3.3586e

-07 202

- magnet\_belt\_y

1 3.3586e

-07 202

- total\_accel\_arm

1 3.3593e

-07 202

- accel\_belt\_x

1 3.3604e

-07 202

- magnet\_forearm\_y

1 3.3614e

-07 202

- gyros\_arm\_x

1 3.3618e

-07 202

- gyros\_forearm\_x

1 3.3622e

-07 202

- roll\_arm

1

3.3654e

-07 202

- yaw\_forearm

1 3.3660e

-07 202

- gyros\_belt\_z

1 3.3672e

-07 202

- gyros\_arm\_y

1 3.3693e

-07 202

- accel\_dumbbell\_z

1 3.3697e

-07 202

- yaw\_dumbbell

1 3.3725e

-07 202

- magnet\_arm\_x

1 3.3745e

-07 202

- magnet\_arm\_z

1 3.3746e

-07 202

- total\_accel\_forearm

1 3.3747e

-07 202

- accel\_dumbbell\_y

1 3.3760e

-07 202

- roll\_belt

1 3.3783e

-07 202

- magnet\_dumbbell\_x

1 3.3844e

-07 202

-

gyros\_arm\_z

1 3.3959e

-07 202

- accel\_belt\_y

1 3.3993e

-07 202

- total\_accel\_dumbbell

1 3.4027e

-07 202

- cvtd\_timestamp

1 3.4060e

-07 202

- user\_name

1 3.4078e

-07 202

- raw\_timestamp\_part\_2

1 3.4200e

-07 202

- total\_accel\_belt

1 3.4210e

-07 202

- magnet\_belt\_x

1 3.4236e

-07 202

- roll\_dumbbell

1 3.4262e

-07 202

- pitch\_belt

1 3.4263e

-07 202

- accel\_forearm\_x

1 3.4278e

-07 202

- accel\_dumbbell\_x

1 3.4278e

-07 202

- gyros\_forearm\_y

1 3.4350e

-07 202

- accel\_forearm\_y

1 3.4389e

-07 202

- gyros\_belt\_y

1 3.4399e

-07 202

- accel\_forearm\_z

1 3.4420e

-07 202

- accel\_arm\_x

1 3.4459e

-07 202

- pitch\_dumbbell

1 3.4477e

-07 202

- pitch\_forearm

1 3.4485e

-07 202

- raw\_timestamp\_part\_1

1 3.4639e

-07 202

- magnet\_belt\_z

1 3.4654e

-07 202

- gyros\_forearm\_z

1 3.4911e

-07 202

- accel\_arm\_z

1 3.5207e

-07 202

- magnet\_forearm\_x

1 3.5847e

-07 202

- magnet\_forearm\_z

1 3.6671e

-07 202

- magnet\_arm\_y

1 3.8311e

-07 202

- accel\_arm\_y 1 3.8788e-07 202

- pitch\_arm 1 4.1428e-07 202

- num\_window 1 6.2104e-07 202

<none> 3.3442e-07 204

Step: AIC=202

classe ~ user\_name + raw\_timestamp\_part\_1 + raw\_timestamp\_part\_2 +

cvtd\_timestamp + new\_window + num\_window + roll\_belt + pitch\_belt +

total\_accel\_belt + kurtosis\_roll\_belt + kurtosis\_picth\_belt +

skewness\_roll\_belt + max\_roll\_belt + max\_yaw\_belt + min\_pitch\_belt +

amplitude\_roll\_belt + var\_total\_accel\_belt + stddev\_roll\_belt +

avg\_pitch\_belt + stddev\_pitch\_belt + var\_pitch\_belt + stddev\_yaw\_belt +

var\_yaw\_belt + gyros\_belt\_x + gyros\_belt\_y + gyros\_belt\_z +

accel\_belt\_x + accel\_belt\_y + accel\_belt\_z + magnet\_belt\_x +

magnet\_belt\_y + magnet\_belt\_z + roll\_arm + pitch\_arm + yaw\_arm +

total\_accel\_arm + var\_accel\_arm + avg\_roll\_arm + stddev\_roll\_arm +

avg\_yaw\_arm + stddev\_yaw\_arm + gyros\_arm\_x + gyros\_arm\_y +

gyros\_arm\_z + accel\_arm\_x + accel\_arm\_y + accel\_arm\_z + magnet\_arm\_x +

magnet\_arm\_y + magnet\_arm\_z + kurtosis\_roll\_arm + max\_roll\_arm +

max\_picth\_arm + max\_yaw\_arm + min\_roll\_arm + min\_yaw\_arm +

roll\_dumbbell + pitch\_dumbbell + yaw\_dumbbell + skewness\_pitch\_dumbbell +

max\_roll\_dumbbell + max\_picth\_dumbbell + min\_pitch\_dumbbell +

amplitude\_roll\_dumbbell + amplitude\_pitch\_dumbbell + total\_accel\_dumbbell

+

var\_roll\_dumbbell + avg\_pitch\_dumbbell + gyros\_dumbbell\_x +

gyros\_dumbbell\_z + accel\_dumbbell\_x + accel\_dumbbell\_y +

accel\_dumbbell\_z + magnet\_dumbbell\_x + magnet\_dumbbell\_z +

pitch\_forearm + yaw\_forearm + kurtosis\_picth\_forearm + skewness\_pitch\_for

earm +

max\_roll\_forearm + max\_yaw\_forearm + min\_roll\_forearm + min\_pitch\_forearm

+

amplitude\_roll\_forearm + total\_accel\_forearm + avg\_roll\_forearm +

stddev\_pitch\_forearm + var\_pitch\_forearm + avg\_yaw\_forearm +

stddev\_yaw\_forearm + var\_yaw\_forearm + gyros\_forearm\_x +

gyros\_forearm\_y + gyros\_forearm\_z + accel\_forearm\_x + accel\_forearm\_y +

accel\_forearm\_z + magnet\_forearm\_x + magnet\_forearm\_y + magnet\_forearm\_z

Df Deviance AIC

- max\_yaw\_forearm 1 3.3444e-07 200

- avg\_yaw\_forearm 1 3.3449e-07 200

- avg\_pitch\_belt 1 3.3452e-07 200

- kurtosis\_picth\_belt 1 3.3452e-07 200

- min\_roll\_forearm 1 3.3453e-07 200

- max\_roll\_forearm 1 3.3453e-07 200

- amplitude\_roll\_forearm 1 3.3454e-07 200

- amplitude\_roll\_belt 1 3.3455e-07 200

- stddev\_roll\_belt 1 3.3455e-07 200

- new\_window 1 3.3456e-07 200

- kurtosis\_picth\_forearm 1 3.3457e-07 200

- skewness\_pitch\_forearm 1 3.3458e-07 200

- amplitude\_roll\_dumbbell 1 3.3459e-07 200

- stddev\_yaw\_belt 1 3.3460e-07 200

- magnet\_dumbbell\_z 1 3.3460e-07 200

- min\_pitch\_belt 1 3.3461e-07 200

- max\_roll\_belt 1 3.3462e-07 200

- yaw\_arm 1 3.3462e-07 200

- avg\_pitch\_dumbbell 1 3.3463e-07 200

- amplitude\_pitch\_dumbbell 1 3.3466e-07 200

- max\_picth\_dumbbell 1 3.3466e-07 200

- min\_pitch\_dumbbell 1 3.3466e-07 200

- stddev\_roll\_arm 1 3.3466e-07 200

- min\_pitch\_forearm 1 3.3467e-07 200

- avg\_roll\_arm 1 3.3468e-07 200

- max\_yaw\_belt 1 3.3468e-07 200

- kurtosis\_roll\_belt 1 3.3469e-07 200

- var\_total\_accel\_belt 1 3.3471e-07 200

- var\_yaw\_belt 1 3.3471e-07 200

- var\_roll\_dumbbell 1 3.3471e-07 200

- avg\_roll\_forearm 1 3.3472e-07 200

- var\_pitch\_forearm 1 3.3475e-07 200

- gyros\_belt\_x 1 3.3479e-07 200

- stddev\_pitch\_belt 1 3.3479e-07 200

- skewness\_pitch\_dumbbell 1 3.3483e-07 200

- stddev\_yaw\_arm 1 3.3483e-07 200

- max\_roll\_dumbbell 1 3.3484e-07 200

- skewness\_roll\_belt 1 3.3490e-07 200

- min\_roll\_arm 1 3.3496e-07 200

- avg\_yaw\_arm 1 3.3497e-07 200

- var\_pitch\_belt 1 3.3498e-07 200

- max\_picth\_arm 1 3.3500e-07 200

- max\_yaw\_arm 1 3.3501e-07 200

- gyros\_dumbbell\_x 1 3.3505e-07 200

- kurtosis\_roll\_arm 1 3.3517e-07 200

- accel\_belt\_z 1 3.3519e-07 200

- var\_accel\_arm 1 3.3525e-07 200

- min\_yaw\_arm 1 3.3526e-07 200

- stddev\_pitch\_forearm 1 3.3529e-07 200

- stddev\_yaw\_forearm 1 3.3552e-07 200

- var\_yaw\_forearm 1 3.3557e-07 200

- gyros\_dumbbell\_z 1 3.3586e-07 200

- max\_roll\_arm 1 3.3587e-07 200

- magnet\_belt\_y 1 3.3590e-07 200

- total\_accel\_arm 1 3.3596e-07 200

- accel\_belt\_x 1 3.3606e-07 200

- magnet\_forearm\_y 1 3.3619e-07 200

- gyros\_arm\_x 1 3.3620e-07 200

- gyros\_forearm\_x 1 3.3630e-07 200

- roll\_arm 1 3.3658e-07 200

- yaw\_forearm 1 3.3662e-07 200

- gyros\_belt\_z 1 3.3677e-07 200

- gyros\_arm\_y 1 3.3694e-07 200

- accel\_dumbbell\_z 1 3.3697e-07 200

- yaw\_dumbbell 1 3.3730e-07 200

- magnet\_arm\_x 1 3.3749e-07 200

- magnet\_arm\_z 1 3.3749e-07 200

- total\_accel\_forearm 1 3.3753e-07 200

- accel\_dumbbell\_y 1 3.3768e-07 200

- roll\_belt 1 3.3792e-07 200

- magnet\_dumbbell\_x 1 3.3856e-07 200

- gyros\_arm\_z 1 3.3964e-07 200

- accel\_belt\_y 1 3.3995e-07 200

- total\_accel\_dumbbell 1 3.4028e-07 200

- cvtd\_timestamp 1 3.4065e-07 200

- user\_name 1 3.4077e-07 200

- raw\_timestamp\_part\_2 1 3.4197e-07 200

- total\_accel\_belt 1 3.4213e-07 200

- magnet\_belt\_x 1 3.4228e-07 200

- pitch\_belt 1 3.4265e-07 200

- roll\_dumbbell 1 3.4272e-07 200

- accel\_forearm\_x 1 3.4281e-07 200

- accel\_dumbbell\_x 1 3.4286e-07 200

- gyros\_forearm\_y 1 3.4353e-07 200

- accel\_forearm\_y 1 3.4401e-07 200

- gyros\_belt\_y 1 3.4401e-07 200

- accel\_forearm\_z 1 3.4422e-07 200

- accel\_arm\_x 1 3.4462e-07 200

- pitch\_dumbbell 1 3.4481e-07 200

- pitch\_forearm 1 3.4490e-07 200

- raw\_timestamp\_part\_1 1 3.4644e-07 200

- magnet\_belt\_z 1 3.4659e-07 200

- gyros\_forearm\_z 1 3.4920e-07 200

- accel\_arm\_z 1 3.5222e-07 200

- magnet\_forearm\_x 1 3.5850e-07 200

- magnet\_forearm\_z 1 3.6679e-07 200

- magnet\_arm\_y 1 3.8341e-07 200

- accel\_arm\_y 1 3.8798e-07 200

- pitch\_arm 1 4.1427e-07 200

- num\_window 1 6.2125e-07 200

<none> 3.3445e-07 202

Step: AIC=200

classe ~ user\_name + raw\_timestamp\_part\_1 + raw\_timestamp\_part\_2 +

cvtd\_timestamp + new\_window + num\_window + roll\_belt + pitch\_belt +

total\_accel\_belt + kurtosis\_roll\_belt + kurtosis\_picth\_belt +

skewness\_roll\_belt + max\_roll\_belt + max\_yaw\_belt + min\_pitch\_belt +

amplitude\_roll\_belt + var\_total\_accel\_belt + stddev\_roll\_belt +

avg\_pitch\_belt + stddev\_pitch\_belt + var\_pitch\_belt + stddev\_yaw\_belt +

var\_yaw\_belt + gyros\_belt\_x + gyros\_belt\_y + gyros\_belt\_z +

accel\_belt\_x + accel\_belt\_y + accel\_belt\_z + magnet\_belt\_x +

magnet\_belt\_y + magnet\_belt\_z + roll\_arm + pitch\_arm + yaw\_arm +

total\_accel\_arm + var\_accel\_arm + avg\_roll\_arm + stddev\_roll\_arm +

avg\_yaw\_arm + stddev\_yaw\_arm + gyros\_arm\_x + gyros\_arm\_y +

gyros\_arm\_z + accel\_arm\_x + accel\_arm\_y + accel\_arm\_z + magnet\_arm\_x +

magnet\_arm\_y + magnet\_arm\_z + kurtosis\_roll\_arm + max\_roll\_arm +

max\_picth\_arm + max\_yaw\_arm + min\_roll\_arm + min\_yaw\_arm +

roll\_dumbbell + pitch\_dumbbell + yaw\_dumbbell + skewness\_pitch\_dumbbell +

max\_roll\_dumbbell + max\_picth\_dumbbell + min\_pitch\_dumbbell +

amplitude\_roll\_dumbbell + amplitude\_pitch\_dumbbell + total\_accel\_dumbbell

+

var\_roll\_dumbbell + avg\_pitch\_dumbbell + gyros\_dumbbell\_x +

gyros\_dumbbell\_z + accel\_dumbbell\_x + accel\_dumbbell\_y +

accel\_dumbbell\_z + magnet\_dumbbell\_x + magnet\_dumbbell\_z +

pitch\_forearm + yaw\_forearm + kurtosis\_picth\_forearm + skewness\_pitch\_for

earm +

max\_roll\_forearm + min\_roll\_forearm + min\_pitch\_forearm +

amplitude\_roll\_forearm + total\_accel\_forearm + avg\_roll\_forearm +

stddev\_pitch\_forearm + var\_pitch\_forearm + avg\_yaw\_forearm +

stddev\_yaw\_forearm + var\_yaw\_forearm + gyros\_forearm\_x +

gyros\_forearm\_y + gyros\_forearm\_z + accel\_forearm\_x + accel\_forearm\_y +

accel\_forearm\_z + magnet\_forearm\_x + magnet\_forearm\_y + magnet\_forearm\_z

Df Deviance AIC

- avg\_yaw\_forearm 1 3.3449e-07 198

- kurtosis\_picth\_belt 1 3.3450e-07 198

- min\_roll\_forearm 1 3.3453e-07 198

- max\_roll\_forearm 1 3.3453e-07 198

- avg\_pitch\_belt 1 3.3453e-07 198

- amplitude\_roll\_forearm 1 3.3454e-07 198

- kurtosis\_picth\_forearm 1 3.3455e-07 198

- new\_window 1 3.3456e-07 198

- skewness\_pitch\_forearm 1 3.3457e-07 198

- amplitude\_roll\_belt 1 3.3459e-07 198

- magnet\_dumbbell\_z 1 3.3460e-07 198

- min\_pitch\_belt 1 3.3461e-07 198

- stddev\_roll\_belt 1 3.3462e-07 198

- amplitude\_roll\_dumbbell 1 3.3462e-07 198

- max\_roll\_belt 1 3.3463e-07 198

- stddev\_yaw\_belt 1 3.3463e-07 198

- yaw\_arm 1 3.3465e-07 198

- avg\_pitch\_dumbbell 1 3.3467e-07 198

- max\_yaw\_belt 1 3.3468e-07 198

- stddev\_roll\_arm 1 3.3468e-07 198

- kurtosis\_roll\_belt 1 3.3469e-07 198

- amplitude\_pitch\_dumbbell 1 3.3469e-07 198

- max\_picth\_dumbbell 1 3.3469e-07 198

- avg\_roll\_arm 1 3.3469e-07 198

- min\_pitch\_dumbbell 1 3.3469e-07 198

- min\_pitch\_forearm 1 3.3469e-07 198

- var\_total\_accel\_belt 1 3.3472e-07 198

- avg\_roll\_forearm 1 3.3473e-07 198

- var\_yaw\_belt 1 3.3473e-07 198

- var\_pitch\_forearm 1 3.3475e-07 198

- var\_roll\_dumbbell 1 3.3478e-07 198

- gyros\_belt\_x 1 3.3481e-07 198

- stddev\_pitch\_belt 1 3.3483e-07 198

- skewness\_pitch\_dumbbell 1 3.3484e-07 198

- max\_roll\_dumbbell 1 3.3486e-07 198

- stddev\_yaw\_arm 1 3.3487e-07 198

- skewness\_roll\_belt 1 3.3492e-07 198

- var\_pitch\_belt 1 3.3499e-07 198

- max\_yaw\_arm 1 3.3500e-07 198

- avg\_yaw\_arm 1 3.3500e-07 198

- max\_picth\_arm 1 3.3503e-07 198

- gyros\_dumbbell\_x 1 3.3504e-07 198

- kurtosis\_roll\_arm 1 3.3512e-07 198

- min\_roll\_arm 1 3.3516e-07 198

- accel\_belt\_z 1 3.3520e-07 198

- var\_accel\_arm 1 3.3528e-07 198

- min\_yaw\_arm 1 3.3528e-07 198

- stddev\_pitch\_forearm 1 3.3530e-07 198

- stddev\_yaw\_forearm 1 3.3553e-07 198

- var\_yaw\_forearm 1 3.3557e-07 198

- gyros\_dumbbell\_z 1 3.3585e-07 198

- total\_accel\_arm 1 3.3595e-07 198

- magnet\_belt\_y 1 3.3599e-07 198

- max\_roll\_arm 1 3.3599e-07 198

- accel\_belt\_x 1 3.3604e-07 198

- gyros\_arm\_x 1 3.3617e-07 198

- magnet\_forearm\_y 1 3.3619e-07 198

- gyros\_forearm\_x 1 3.3633e-07 198

- roll\_arm 1 3.3656e-07 198

- yaw\_forearm 1 3.3667e-07 198

- gyros\_belt\_z 1 3.3680e-07 198

- gyros\_arm\_y 1 3.3692e-07 198

- accel\_dumbbell\_z 1 3.3699e-07 198

- yaw\_dumbbell 1 3.3728e-07 198

- magnet\_arm\_x 1 3.3744e-07 198

- magnet\_arm\_z 1 3.3751e-07 198

- total\_accel\_forearm 1 3.3759e-07 198

- accel\_dumbbell\_y 1 3.3764e-07 198

- roll\_belt 1 3.3782e-07 198

- magnet\_dumbbell\_x 1 3.3860e-07 198

- gyros\_arm\_z 1 3.3965e-07 198

- accel\_belt\_y 1 3.3995e-07 198

- total\_accel\_dumbbell 1 3.4036e-07 198

- cvtd\_timestamp 1 3.4067e-07 198

- user\_name 1 3.4075e-07 198

- raw\_timestamp\_part\_2 1 3.4197e-07 198

- total\_accel\_belt 1 3.4213e-07 198

- magnet\_belt\_x 1 3.4230e-07 198

- pitch\_belt 1 3.4267e-07 198

- roll\_dumbbell 1 3.4272e-07 198

- accel\_dumbbell\_x 1 3.4285e-07 198

- accel\_forearm\_x 1 3.4286e-07 198

- gyros\_forearm\_y 1 3.4352e-07 198

- accel\_forearm\_y 1 3.4405e-07 198

- gyros\_belt\_y 1 3.4405e-07 198

- accel\_forearm\_z 1 3.4423e-07 198

- accel\_arm\_x 1 3.4466e-07 198

- pitch\_dumbbell 1 3.4485e-07 198

- pitch\_forearm 1 3.4519e-07 198

- raw\_timestamp\_part\_1 1 3.4639e-07 198

- magnet\_belt\_z 1 3.4658e-07 198

- gyros\_forearm\_z 1 3.4913e-07 198

- accel\_arm\_z 1 3.5218e-07 198

- magnet\_forearm\_x 1 3.5853e-07 198

- magnet\_forearm\_z 1 3.6679e-07 198

- magnet\_arm\_y 1 3.8318e-07 198

- accel\_arm\_y 1 3.8800e-07 198

- pitch\_arm 1 4.1436e-07 198

- num\_window 1 6.2136e-07 198

<none> 3.3444e-07 200

Step: AIC=198

classe ~ user\_name + raw\_timestamp\_part\_1 + raw\_timestamp\_part\_2 +

cvtd\_timestamp + new\_window + num\_window + roll\_belt + pitch\_belt +

total\_accel\_belt + kurtosis\_roll\_belt + kurtosis\_picth\_belt +

skewness\_roll\_belt + max\_roll\_belt + max\_yaw\_belt + min\_pitch\_belt +

amplitude\_roll\_belt + var\_total\_accel\_belt + stddev\_roll\_belt +

avg\_pitch\_belt + stddev\_pitch\_belt + var\_pitch\_belt + stddev\_yaw\_belt +

var\_yaw\_belt + gyros\_belt\_x + gyros\_belt\_y + gyros\_belt\_z +

accel\_belt\_x + accel\_belt\_y + accel\_belt\_z + magnet\_belt\_x +

magnet\_belt\_y + magnet\_belt\_z + roll\_arm + pitch\_arm + yaw\_arm +

total\_accel\_arm + var\_accel\_arm + avg\_roll\_arm + stddev\_roll\_arm +

avg\_yaw\_arm + stddev\_yaw\_arm + gyros\_arm\_x + gyros\_arm\_y +

gyros\_arm\_z + accel\_arm\_x + accel\_arm\_y + accel\_arm\_z + magnet\_arm\_x +

magnet\_arm\_y + magnet\_arm\_z + kurtosis\_roll\_arm + max\_roll\_arm +

max\_picth\_arm + max\_yaw\_arm + min\_roll\_arm + min\_yaw\_arm +

roll\_dumbbell + pitch\_dumbbell + yaw\_dumbbell + skewness\_pitch\_dumbbell +

max\_roll\_dumbbell + max\_picth\_dumbbell + min\_pitch\_dumbbell +

amplitude\_roll\_dumbbell + amplitude\_pitch\_dumbbell + total\_accel\_dumbbell

+

var\_roll\_dumbbell + avg\_pitch\_dumbbell + gyros\_dumbbell\_x +

gyros\_dumbbell\_z + accel\_dumbbell\_x + accel\_dumbbell\_y +

accel\_dumbbell\_z + magnet\_dumbbell\_x + magnet\_dumbbell\_z +

pitch\_forearm + yaw\_forearm + kurtosis\_picth\_forearm + skewness\_pitch\_for

earm +

max\_roll\_forearm + min\_roll\_forearm + min\_pitch\_forearm +

amplitude\_roll\_forearm + total\_accel\_forearm + avg\_roll\_forearm +

stddev\_pitch\_forearm + var\_pitch\_forearm + stddev\_yaw\_forearm +

var\_yaw\_forearm + gyros\_forearm\_x + gyros\_forearm\_y + gyros\_forearm\_z +

accel\_forearm\_x + accel\_forearm\_y + accel\_forearm\_z + magnet\_forearm\_x +

magnet\_forearm\_y + magnet\_forearm\_z

Df Deviance AIC

- kurtosis\_picth\_belt 1 3.3453e-07 196

- skewness\_pitch\_forearm 1 3.3456e-07 196

- amplitude\_roll\_dumbbell 1 3.3458e-07 196

- kurtosis\_picth\_forearm 1 3.3458e-07 196

- stddev\_roll\_belt 1 3.3458e-07 196

- new\_window 1 3.3459e-07 196

- avg\_pitch\_belt 1 3.3460e-07 196

- min\_roll\_forearm 1 3.3462e-07 196

- max\_roll\_forearm 1 3.3462e-07 196

- amplitude\_roll\_forearm 1 3.3462e-07 196

- min\_pitch\_belt 1 3.3463e-07 196

- amplitude\_roll\_belt 1 3.3463e-07 196

- magnet\_dumbbell\_z 1 3.3465e-07 196

- max\_roll\_belt 1 3.3466e-07 196

- avg\_pitch\_dumbbell 1 3.3467e-07 196

- yaw\_arm 1 3.3467e-07 196

- avg\_roll\_arm 1 3.3468e-07 196

- amplitude\_pitch\_dumbbell 1 3.3469e-07 196

- stddev\_yaw\_belt 1 3.3469e-07 196

- max\_picth\_dumbbell 1 3.3469e-07 196

- min\_pitch\_dumbbell 1 3.3469e-07 196

- min\_pitch\_forearm 1 3.3472e-07 196

- stddev\_roll\_arm 1 3.3472e-07 196

- max\_yaw\_belt 1 3.3472e-07 196

- var\_total\_accel\_belt 1 3.3472e-07 196

- kurtosis\_roll\_belt 1 3.3473e-07 196

- var\_yaw\_belt 1 3.3477e-07 196

- var\_roll\_dumbbell 1 3.3478e-07 196

- var\_pitch\_forearm 1 3.3479e-07 196

- stddev\_pitch\_belt 1 3.3480e-07 196

- stddev\_yaw\_arm 1 3.3482e-07 196

- max\_roll\_dumbbell 1 3.3482e-07 196

- gyros\_belt\_x 1 3.3485e-07 196

- skewness\_pitch\_dumbbell 1 3.3485e-07 196

- avg\_yaw\_arm 1 3.3495e-07 196

- skewness\_roll\_belt 1 3.3496e-07 196

- max\_picth\_arm 1 3.3499e-07 196

- var\_pitch\_belt

1 3.3502e

-07 196

- avg\_roll\_forearm

1 3.3507e

-07 196

- gyros\_dumbbell\_x

1 3.3508e

-07 196

- max\_yaw\_arm

1 3.3516e

-07 196

-

accel\_belt\_z

1 3.3524e

-07 196

- var\_accel\_arm

1 3.3530e

-07 196

- min\_yaw\_arm

1 3.3532e

-07 196

- kurtosis\_roll\_arm

1 3.3533e

-07 196

- stddev\_pitch\_forearm

1 3.3533e

-07 196

- min\_roll\_arm

1 3.3534e

-07 196

- stddev\_yaw\_forearm

1 3.3581e

-07 196

- var\_yaw\_forearm

1 3.3583e

-07 196

- gyros\_dumbbell\_z

1 3.3584e

-07 196

- magnet\_belt\_y

1 3.3596e

-07 196

- total\_accel\_arm

1 3.3599e

-07 196

- accel\_belt\_x

1 3.3610e

-07 196

- max\_roll\_arm

1 3.3612e

-07 196

- gyros\_arm\_x

1 3.3616e

-07 196

- magnet\_forearm\_y

1 3.3620e

-07 196

- gyros\_forearm\_x

1 3.3631e

-07 196

- roll\_arm

1 3.3657e

-07 196

- yaw\_forearm

1 3.3671e

-07 196

- gyros\_belt\_z

1 3.3682e

-07 196

- gyros\_arm\_y

1 3.3695e

-07 196

- accel\_dumbbell\_z

1 3.3703e

-07 196

- yaw\_dumbbell

1 3.3725e

-07 196

- magnet\_arm\_x

1 3.3753e

-07 196

- total\_accel\_forearm

1 3.3755e

-07 196

- magnet\_arm\_z

1 3.3756e

-07 196

- accel\_dumbbell\_y

1 3.3774e

-07 196

- roll\_belt

1 3.3791e

-07 196

- magnet\_dumbbell\_x

1 3.3853e

-07 196

- gyros\_arm\_z

1 3.3969e

-07 196

- accel\_belt\_y

1 3.3998e

-07 196

- total\_accel\_dumbbell

1 3.4030e

-07 196

- cvtd\_timestamp

1 3.4074e

-07 196

- user\_name

1 3.4084e

-07 196

- raw\_timestamp\_part\_2

1 3.4193e

-07 196

- total\_accel\_belt

1 3.4209e

-07 196

- magnet\_belt\_x

1 3.4231e

-07 196

- roll\_dumbbell

1 3.4275e

-07 196

- pitch\_belt

1 3.4275e

-07 196

- accel\_dumbbell\_x

1 3.4282e

-07 196

- accel\_forearm\_x

1 3.4287e

-07 196

- gyros\_forearm\_y

1 3.4361e

-07 196

- accel\_forearm\_y

1 3.4403e

-07 196

- gyros\_belt\_y

1 3.4406e

-07 196

- accel\_forearm\_z

1 3.4427e

-07 196

- accel\_arm\_x

1 3.4459e

-07 196

- pitch\_dumbbell

1 3.4485e

-07 196

- pitch\_forearm

1 3.4495e

-07 196

- raw\_timestamp\_part\_1

1 3.4641e

-07 196

- magnet\_belt\_z

1 3.4662e

-07 196

- gyros\_forearm\_z

1 3.4923e

-07 196

- accel\_arm\_z

1 3.5217e

-07 196

- magnet\_forearm\_x

1 3.5860e

-07 196

- magnet\_forearm\_z

1 3.6677e

-07 196

- magnet\_arm\_y 1 3.8317e-07 196

- accel\_arm\_y 1 3.8799e-07 196

- pitch\_arm 1 4.1441e-07 196

- num\_window 1 6.2147e-07 196

<none> 3.3449e-07 198

Step: AIC=196

classe ~ user\_name + raw\_timestamp\_part\_1 + raw\_timestamp\_part\_2 +

cvtd\_timestamp + new\_window + num\_window + roll\_belt + pitch\_belt +

total\_accel\_belt + kurtosis\_roll\_belt + skewness\_roll\_belt +

max\_roll\_belt + max\_yaw\_belt + min\_pitch\_belt + amplitude\_roll\_belt +

var\_total\_accel\_belt + stddev\_roll\_belt + avg\_pitch\_belt +

stddev\_pitch\_belt + var\_pitch\_belt + stddev\_yaw\_belt + var\_yaw\_belt +

gyros\_belt\_x + gyros\_belt\_y + gyros\_belt\_z + accel\_belt\_x +

accel\_belt\_y + accel\_belt\_z + magnet\_belt\_x + magnet\_belt\_y +

magnet\_belt\_z + roll\_arm + pitch\_arm + yaw\_arm + total\_accel\_arm +

var\_accel\_arm + avg\_roll\_arm + stddev\_roll\_arm + avg\_yaw\_arm +

stddev\_yaw\_arm + gyros\_arm\_x + gyros\_arm\_y + gyros\_arm\_z +

accel\_arm\_x + accel\_arm\_y + accel\_arm\_z + magnet\_arm\_x +

magnet\_arm\_y + magnet\_arm\_z + kurtosis\_roll\_arm + max\_roll\_arm +

max\_picth\_arm + max\_yaw\_arm + min\_roll\_arm + min\_yaw\_arm +

roll\_dumbbell + pitch\_dumbbell + yaw\_dumbbell + skewness\_pitch\_dumbbell +

max\_roll\_dumbbell + max\_picth\_dumbbell + min\_pitch\_dumbbell +

amplitude\_roll\_dumbbell + amplitude\_pitch\_dumbbell + total\_accel\_dumbbell

+

var\_roll\_dumbbell + avg\_pitch\_dumbbell + gyros\_dumbbell\_x +

gyros\_dumbbell\_z + accel\_dumbbell\_x + accel\_dumbbell\_y +

accel\_dumbbell\_z + magnet\_dumbbell\_x + magnet\_dumbbell\_z +

pitch\_forearm + yaw\_forearm + kurtosis\_picth\_forearm + skewness\_pitch\_for

earm +

max\_roll\_forearm + min\_roll\_forearm + min\_pitch\_forearm +

amplitude\_roll\_forearm + total\_accel\_forearm + avg\_roll\_forearm +

stddev\_pitch\_forearm + var\_pitch\_forearm + stddev\_yaw\_forearm +

var\_yaw\_forearm + gyros\_forearm\_x + gyros\_forearm\_y + gyros\_forearm\_z +

accel\_forearm\_x + accel\_forearm\_y + accel\_forearm\_z + magnet\_forearm\_x +

magnet\_forearm\_y + magnet\_forearm\_z

Df Deviance AIC

- kurtosis\_picth\_forearm 1 3.3456e-07 194

- stddev\_roll\_belt 1 3.3457e-07 194

- avg\_pitch\_belt 1 3.3460e-07 194

- min\_roll\_forearm 1 3.3461e-07 194

- max\_roll\_forearm 1 3.3461e-07 194

- amplitude\_roll\_forearm 1 3.3461e-07 194

- skewness\_pitch\_forearm 1 3.3462e-07 194

- avg\_pitch\_dumbbell 1 3.3465e-07 194

- new\_window 1 3.3466e-07 194

- var\_total\_accel\_belt 1 3.3468e-07 194

- yaw\_arm 1 3.3468e-07 194

- magnet\_dumbbell\_z 1 3.3469e-07 194

- min\_pitch\_belt 1 3.3470e-07 194

- amplitude\_roll\_belt 1 3.3470e-07 194

- amplitude\_pitch\_dumbbell 1 3.3470e-07 194

- max\_picth\_dumbbell 1 3.3470e-07 194

- min\_pitch\_dumbbell 1 3.3471e-07 194

- max\_roll\_belt 1 3.3471e-07 194

- amplitude\_roll\_dumbbell 1 3.3471e-07 194

- stddev\_yaw\_belt 1 3.3472e-07 194

- avg\_roll\_arm 1 3.3472e-07 194

- max\_yaw\_belt 1 3.3473e-07 194

- kurtosis\_roll\_belt 1 3.3473e-07 194

- var\_pitch\_forearm 1 3.3476e-07 194

- stddev\_roll\_arm 1 3.3477e-07 194

- var\_yaw\_belt 1 3.3477e-07 194

- var\_roll\_dumbbell 1 3.3478e-07 194

- stddev\_yaw\_arm 1 3.3482e-07 194

- stddev\_pitch\_belt 1 3.3484e-07 194

- min\_pitch\_forearm 1 3.3485e-07 194

- skewness\_pitch\_dumbbell 1 3.3486e-07 194

- gyros\_belt\_x 1 3.3488e-07 194

- max\_roll\_dumbbell 1 3.3494e-07 194

- avg\_yaw\_arm 1 3.3496e-07 194

- skewness\_roll\_belt 1 3.3496e-07 194

- var\_pitch\_belt 1 3.3501e-07 194

- max\_picth\_arm 1 3.3503e-07 194

- avg\_roll\_forearm 1 3.3504e-07 194

- gyros\_dumbbell\_x 1 3.3511e-07 194

- max\_yaw\_arm 1 3.3517e-07 194

- accel\_belt\_z 1 3.3526e-07 194

- kurtosis\_roll\_arm 1 3.3528e-07 194

- var\_accel\_arm 1 3.3530e-07 194

- stddev\_pitch\_forearm 1 3.3536e-07 194

- min\_yaw\_arm 1 3.3540e-07 194

- min\_roll\_arm 1 3.3550e-07 194

- gyros\_dumbbell\_z 1 3.3585e-07 194

- stddev\_yaw\_forearm 1 3.3588e-07 194

- var\_yaw\_forearm 1 3.3596e-07 194

- magnet\_belt\_y 1 3.3598e-07 194

- total\_accel\_arm 1 3.3599e-07 194

- accel\_belt\_x 1 3.3615e-07 194

- magnet\_forearm\_y 1 3.3623e-07 194

- gyros\_arm\_x 1 3.3625e-07 194

- max\_roll\_arm 1 3.3627e-07 194

- gyros\_forearm\_x 1 3.3631e-07 194

- roll\_arm 1 3.3662e-07 194

- yaw\_forearm 1 3.3669e-07 194

- gyros\_belt\_z 1 3.3683e-07 194

- gyros\_arm\_y 1 3.3699e-07 194

- accel\_dumbbell\_z 1 3.3705e-07 194

- yaw\_dumbbell 1 3.3730e-07 194

- total\_accel\_forearm 1 3.3754e-07 194

- magnet\_arm\_x 1 3.3756e-07 194

- magnet\_arm\_z 1 3.3761e-07 194

- accel\_dumbbell\_y 1 3.3774e-07 194

- roll\_belt 1 3.3790e-07 194

- magnet\_dumbbell\_x 1 3.3846e-07 194

- gyros\_arm\_z 1 3.3968e-07 194

- accel\_belt\_y 1 3.3999e-07 194

- total\_accel\_dumbbell 1 3.4029e-07 194

- cvtd\_timestamp 1 3.4079e-07 194

- user\_name 1 3.4087e-07 194

- raw\_timestamp\_part\_2 1 3.4202e-07 194

- total\_accel\_belt 1 3.4212e-07 194

- magnet\_belt\_x 1 3.4240e-07 194

- roll\_dumbbell 1 3.4276e-07 194

- pitch\_belt 1 3.4280e-07 194

- accel\_dumbbell\_x 1 3.4280e-07 194

- accel\_forearm\_x 1 3.4289e-07 194

- gyros\_forearm\_y 1 3.4361e-07 194

- accel\_forearm\_y 1 3.4405e-07 194

- gyros\_belt\_y 1 3.4409e-07 194

- accel\_forearm\_z 1 3.4433e-07 194

- accel\_arm\_x 1 3.4456e-07 194

- pitch\_dumbbell 1 3.4484e-07 194

- pitch\_forearm 1 3.4543e-07 194

- raw\_timestamp\_part\_1 1 3.4648e-07 194

- magnet\_belt\_z 1 3.4664e-07 194

- gyros\_forearm\_z 1 3.4922e-07 194

- accel\_arm\_z 1 3.5222e-07 194

- magnet\_forearm\_x 1 3.5865e-07 194

- magnet\_forearm\_z 1 3.6684e-07 194

- magnet\_arm\_y 1 3.8327e-07 194

- accel\_arm\_y 1 3.8801e-07 194

- pitch\_arm 1 4.1442e-07 194

- num\_window 1 6.2151e-07 194

<none> 3.3453e-07 196

Step: AIC=194

classe ~ user\_name + raw\_timestamp\_part\_1 + raw\_timestamp\_part\_2 +

cvtd\_timestamp + new\_window + num\_window + roll\_belt + pitch\_belt +

total\_accel\_belt + kurtosis\_roll\_belt + skewness\_roll\_belt +

max\_roll\_belt + max\_yaw\_belt + min\_pitch\_belt + amplitude\_roll\_belt +

var\_total\_accel\_belt + stddev\_roll\_belt + avg\_pitch\_belt +

stddev\_pitch\_belt + var\_pitch\_belt + stddev\_yaw\_belt + var\_yaw\_belt +

gyros\_belt\_x + gyros\_belt\_y + gyros\_belt\_z + accel\_belt\_x +

accel\_belt\_y + accel\_belt\_z + magnet\_belt\_x + magnet\_belt\_y +

magnet\_belt\_z + roll\_arm + pitch\_arm + yaw\_arm + total\_accel\_arm +

var\_accel\_arm + avg\_roll\_arm + stddev\_roll\_arm + avg\_yaw\_arm +

stddev\_yaw\_arm + gyros\_arm\_x + gyros\_arm\_y + gyros\_arm\_z +

accel\_arm\_x + accel\_arm\_y + accel\_arm\_z + magnet\_arm\_x +

magnet\_arm\_y + magnet\_arm\_z + kurtosis\_roll\_arm + max\_roll\_arm +

max\_picth\_arm + max\_yaw\_arm + min\_roll\_arm + min\_yaw\_arm +

roll\_dumbbell + pitch\_dumbbell + yaw\_dumbbell + skewness\_pitch\_dumbbell +

max\_roll\_dumbbell + max\_picth\_dumbbell + min\_pitch\_dumbbell +

amplitude\_roll\_dumbbell + amplitude\_pitch\_dumbbell + total\_accel\_dumbbell

+

var\_roll\_dumbbell + avg\_pitch\_dumbbell + gyros\_dumbbell\_x +

gyros\_dumbbell\_z + accel\_dumbbell\_x + accel\_dumbbell\_y +

accel\_dumbbell\_z + magnet\_dumbbell\_x + magnet\_dumbbell\_z +

pitch\_forearm + yaw\_forearm + skewness\_pitch\_forearm + max\_roll\_forearm +

min\_roll\_forearm + min\_pitch\_forearm + amplitude\_roll\_forearm +

total\_accel\_forearm + avg\_roll\_forearm + stddev\_pitch\_forearm +

var\_pitch\_forearm + stddev\_yaw\_forearm + var\_yaw\_forearm +

gyros\_forearm\_x + gyros\_forearm\_y + gyros\_forearm\_z + accel\_forearm\_x +

accel\_forearm\_y + accel\_forearm\_z + magnet\_forearm\_x + magnet\_forearm\_y +

magnet\_forearm\_z

Df Deviance AIC

- stddev\_roll\_belt 1 3.3461e-07 192

- avg\_pitch\_belt 1 3.3462e-07 192

- min\_roll\_forearm 1 3.3465e-07 192

- max\_roll\_forearm 1 3.3465e-07 192

- amplitude\_roll\_forearm 1 3.3466e-07 192

- amplitude\_pitch\_dumbbell 1 3.3469e-07 192

- max\_picth\_dumbbell 1 3.3469e-07 192

- min\_pitch\_dumbbell 1 3.3469e-07 192

- avg\_pitch\_dumbbell 1 3.3471e-07 192

- var\_total\_accel\_belt 1 3.3471e-07 192

- amplitude\_roll\_dumbbell 1 3.3474e-07 192

- magnet\_dumbbell\_z 1 3.3474e-07 192

- yaw\_arm 1 3.3475e-07 192

- new\_window 1 3.3476e-07 192

- max\_roll\_belt 1 3.3476e-07 192

- min\_pitch\_belt 1 3.3476e-07 192

- avg\_roll\_arm 1 3.3478e-07 192

- amplitude\_roll\_belt 1 3.3480e-07 192

- stddev\_roll\_arm 1 3.3480e-07 192

- var\_roll\_dumbbell 1 3.3484e-07 192

- stddev\_yaw\_belt 1 3.3484e-07 192

- var\_pitch\_forearm 1 3.3485e-07 192

- stddev\_pitch\_belt 1 3.3490e-07 192

- stddev\_yaw\_arm 1 3.3491e-07 192

- var\_yaw\_belt 1 3.3491e-07 192

- skewness\_pitch\_dumbbell 1 3.3493e-07 192

- gyros\_belt\_x 1 3.3495e-07 192

- avg\_yaw\_arm 1 3.3497e-07 192

- max\_roll\_dumbbell 1 3.3498e-07 192

- min\_pitch\_forearm 1 3.3499e-07 192

- skewness\_pitch\_forearm 1 3.3502e-07 192

- max\_yaw\_belt 1 3.3502e-07 192

- kurtosis\_roll\_belt 1 3.3503e-07 192

- max\_picth\_arm 1 3.3503e-07 192

- avg\_roll\_forearm 1 3.3503e-07 192

- skewness\_roll\_belt 1 3.3512e-07 192

- var\_pitch\_belt 1 3.3513e-07 192

- max\_yaw\_arm 1 3.3516e-07 192

- gyros\_dumbbell\_x 1 3.3518e-07 192

- var\_accel\_arm 1 3.3530e-07 192

- accel\_belt\_z 1 3.3534e-07 192

- min\_yaw\_arm 1 3.3541e-07 192

- stddev\_pitch\_forearm 1 3.3542e-07 192

- kurtosis\_roll\_arm 1 3.3546e-07 192

- min\_roll\_arm 1 3.3567e-07 192

- stddev\_yaw\_forearm 1 3.3588e-07 192

- gyros\_dumbbell\_z 1 3.3590e-07 192

- var\_yaw\_forearm 1 3.3593e-07 192

- total\_accel\_arm 1 3.3602e-07 192

- magnet\_belt\_y 1 3.3607e-07 192

- accel\_belt\_x 1 3.3622e-07 192

- magnet\_forearm\_y 1 3.3628e-07 192

- gyros\_arm\_x 1 3.3632e-07 192

- gyros\_forearm\_x 1 3.3640e-07 192

- max\_roll\_arm 1 3.3650e-07 192

- roll\_arm 1 3.3661e-07 192

- yaw\_forearm 1 3.3683e-07 192

- gyros\_belt\_z 1 3.3691e-07 192

- gyros\_arm\_y 1 3.3710e-07 192

- accel\_dumbbell\_z 1 3.3723e-07 192

- yaw\_dumbbell 1 3.3744e-07 192

- magnet\_arm\_x 1 3.3763e-07 192

- total\_accel\_forearm 1 3.3765e-07 192

- magnet\_arm\_z 1 3.3770e-07 192

- accel\_dumbbell\_y 1 3.3787e-07 192

- roll\_belt 1 3.3801e-07 192

- magnet\_dumbbell\_x 1 3.3852e-07 192

- gyros\_arm\_z 1 3.3984e-07 192

- accel\_belt\_y 1 3.4022e-07 192

- total\_accel\_dumbbell 1 3.4039e-07 192

- cvtd\_timestamp 1 3.4084e-07 192

- user\_name 1 3.4092e-07 192

- raw\_timestamp\_part\_2 1 3.4212e-07 192

- total\_accel\_belt 1 3.4219e-07 192

- magnet\_belt\_x 1 3.4245e-07 192

- pitch\_belt 1 3.4285e-07 192

- roll\_dumbbell 1 3.4295e-07 192

- accel\_dumbbell\_x 1 3.4300e-07 192

- accel\_forearm\_x 1 3.4307e-07 192

- gyros\_forearm\_y 1 3.4376e-07 192

- gyros\_belt\_y 1 3.4416e-07 192

- accel\_forearm\_y 1 3.4423e-07 192

- accel\_forearm\_z 1 3.4447e-07 192

- accel\_arm\_x 1 3.4470e-07 192

- pitch\_forearm 1 3.4510e-07 192

- pitch\_dumbbell 1 3.4512e-07 192

- raw\_timestamp\_part\_1 1 3.4654e-07 192

- magnet\_belt\_z 1 3.4675e-07 192

- gyros\_forearm\_z 1 3.4942e-07 192

- accel\_arm\_z 1 3.5239e-07 192

- magnet\_forearm\_x 1 3.5884e-07 192

- magnet\_forearm\_z 1 3.6700e-07 192

- magnet\_arm\_y 1 3.8349e-07 192

- accel\_arm\_y 1 3.8815e-07 192

- pitch\_arm 1 4.1449e-07 192

- num\_window 1 6.2165e-07 192

<none> 3.3456e-07 194

Step: AIC=192

classe ~ user\_name + raw\_timestamp\_part\_1 + raw\_timestamp\_part\_2 +

cvtd\_timestamp + new\_window + num\_window + roll\_belt + pitch\_belt +

total\_accel\_belt + kurtosis\_roll\_belt + skewness\_roll\_belt +

max\_roll\_belt + max\_yaw\_belt + min\_pitch\_belt + amplitude\_roll\_belt +

var\_total\_accel\_belt + avg\_pitch\_belt + stddev\_pitch\_belt +

var\_pitch\_belt + stddev\_yaw\_belt + var\_yaw\_belt + gyros\_belt\_x +

gyros\_belt\_y + gyros\_belt\_z + accel\_belt\_x + accel\_belt\_y +

accel\_belt\_z + magnet\_belt\_x + magnet\_belt\_y + magnet\_belt\_z +

roll\_arm + pitch\_arm + yaw\_arm + total\_accel\_arm + var\_accel\_arm +

avg\_roll\_arm + stddev\_roll\_arm + avg\_yaw\_arm + stddev\_yaw\_arm +

gyros\_arm\_x + gyros\_arm\_y + gyros\_arm\_z + accel\_arm\_x + accel\_arm\_y +

accel\_arm\_z + magnet\_arm\_x + magnet\_arm\_y + magnet\_arm\_z +

kurtosis\_roll\_arm + max\_roll\_arm + max\_picth\_arm + max\_yaw\_arm +

min\_roll\_arm + min\_yaw\_arm + roll\_dumbbell + pitch\_dumbbell +

yaw\_dumbbell + skewness\_pitch\_dumbbell + max\_roll\_dumbbell +

max\_picth\_dumbbell + min\_pitch\_dumbbell + amplitude\_roll\_dumbbell +

amplitude\_pitch\_dumbbell + total\_accel\_dumbbell + var\_roll\_dumbbell +

avg\_pitch\_dumbbell + gyros\_dumbbell\_x + gyros\_dumbbell\_z +

accel\_dumbbell\_x + accel\_dumbbell\_y + accel\_dumbbell\_z +

magnet\_dumbbell\_x + magnet\_dumbbell\_z + pitch\_forearm + yaw\_forearm +

skewness\_pitch\_forearm + max\_roll\_forearm + min\_roll\_forearm +

min\_pitch\_forearm + amplitude\_roll\_forearm + total\_accel\_forearm +

avg\_roll\_forearm + stddev\_pitch\_forearm + var\_pitch\_forearm +

stddev\_yaw\_forearm + var\_yaw\_forearm + gyros\_forearm\_x +

gyros\_forearm\_y + gyros\_forearm\_z + accel\_forearm\_x + accel\_forearm\_y +

accel\_forearm\_z + magnet\_forearm\_x + magnet\_forearm\_y + magnet\_forearm\_z

Df Deviance AIC

- avg\_pitch\_belt 1 3.3466e-07 190

- min\_roll\_forearm 1 3.3467e-07 190

- max\_roll\_forearm 1 3.3467e-07 190

- amplitude\_roll\_forearm 1 3.3468e-07 190

- amplitude\_pitch\_dumbbell 1 3.3471e-07 190

- max\_picth\_dumbbell 1 3.3471e-07 190

- min\_pitch\_dumbbell 1 3.3471e-07 190

- avg\_pitch\_dumbbell 1 3.3473e-07 190

- var\_total\_accel\_belt 1 3.3475e-07 190

- magnet\_dumbbell\_z 1 3.3479e-07 190

- yaw\_arm 1 3.3480e-07 190

- avg\_roll\_arm 1 3.3480e-07 190

- max\_roll\_belt 1 3.3480e-07 190

- min\_pitch\_belt 1 3.3482e-07 190

- amplitude\_roll\_dumbbell 1 3.3482e-07 190

- new\_window 1 3.3483e-07 190

- amplitude\_roll\_belt 1 3.3484e-07 190

- var\_roll\_dumbbell 1 3.3485e-07 190

- stddev\_roll\_arm 1 3.3486e-07 190

- stddev\_yaw\_belt 1 3.3488e-07 190

- stddev\_yaw\_arm 1 3.3491e-07 190

- var\_pitch\_forearm 1 3.3491e-07 190

- stddev\_pitch\_belt 1 3.3492e-07 190

- var\_yaw\_belt 1 3.3495e-07 190

- avg\_yaw\_arm 1 3.3497e-07 190

- gyros\_belt\_x 1 3.3499e-07 190

- max\_roll\_dumbbell 1 3.3499e-07 190

- skewness\_pitch\_dumbbell 1 3.3501e-07 190

- max\_picth\_arm 1 3.3502e-07 190

- avg\_roll\_forearm 1 3.3503e-07 190

- min\_pitch\_forearm 1 3.3504e-07 190

- skewness\_pitch\_forearm 1 3.3510e-07 190

- max\_yaw\_belt 1 3.3512e-07 190

- skewness\_roll\_belt 1 3.3512e-07 190

- var\_pitch\_belt 1 3.3513e-07 190

- kurtosis\_roll\_belt 1 3.3513e-07 190

- max\_yaw\_arm 1 3.3516e-07 190

- gyros\_dumbbell\_x 1 3.3521e-07 190

- var\_accel\_arm 1 3.3534e-07 190

- accel\_belt\_z 1 3.3537e-07 190

- min\_yaw\_arm 1 3.3546e-07 190

- stddev\_pitch\_forearm 1 3.3546e-07 190

- kurtosis\_roll\_arm 1 3.3556e-07 190

- min\_roll\_arm 1 3.3576e-07 190

- stddev\_yaw\_forearm 1 3.3592e-07 190

- gyros\_dumbbell\_z 1 3.3593e-07 190

- var\_yaw\_forearm 1 3.3599e-07 190

- total\_accel\_arm 1 3.3606e-07 190

- magnet\_belt\_y 1 3.3611e-07 190

- accel\_belt\_x 1 3.3627e-07 190

- magnet\_forearm\_y 1 3.3632e-07 190

- gyros\_arm\_x 1 3.3634e-07 190

- gyros\_forearm\_x 1 3.3643e-07 190

- roll\_arm 1 3.3667e-07 190

- yaw\_forearm 1 3.3688e-07 190

- gyros\_belt\_z 1 3.3696e-07 190

- gyros\_arm\_y 1 3.3711e-07 190

- accel\_dumbbell\_z 1 3.3733e-07 190

- yaw\_dumbbell 1 3.3753e-07 190

- magnet\_arm\_x 1 3.3764e-07 190

- total\_accel\_forearm 1 3.3769e-07 190

- magnet\_arm\_z 1 3.3775e-07 190

- accel\_dumbbell\_y 1 3.3794e-07 190

- roll\_belt 1 3.3803e-07 190

- magnet\_dumbbell\_x 1 3.3864e-07 190

- gyros\_arm\_z 1 3.3990e-07 190

- accel\_belt\_y 1 3.4026e-07 190

- total\_accel\_dumbbell 1 3.4037e-07 190

- cvtd\_timestamp 1 3.4090e-07 190

- user\_name 1 3.4106e-07 190

- raw\_timestamp\_part\_2 1 3.4222e-07 190

- total\_accel\_belt 1 3.4225e-07 190

- magnet\_belt\_x 1 3.4247e-07 190

- pitch\_belt 1 3.4289e-07 190

- roll\_dumbbell 1 3.4297e-07 190

- accel\_dumbbell\_x 1 3.4305e-07 190

- accel\_forearm\_x 1 3.4315e-07 190

- gyros\_forearm\_y 1 3.4384e-07 190

- gyros\_belt\_y 1 3.4419e-07 190

- accel\_forearm\_y 1 3.4426e-07 190

- accel\_forearm\_z 1 3.4449e-07 190

- accel\_arm\_x 1 3.4479e-07 190

- pitch\_forearm 1 3.4509e-07 190

- pitch\_dumbbell 1 3.4518e-07 190

- raw\_timestamp\_part\_1 1 3.4660e-07 190

- magnet\_belt\_z 1 3.4680e-07 190

- gyros\_forearm\_z 1 3.4946e-07 190

- accel\_arm\_z 1 3.5245e-07 190

- magnet\_forearm\_x 1 3.5896e-07 190

- magnet\_forearm\_z 1 3.6693e-07 190

- magnet\_arm\_y 1 3.8342e-07 190

- accel\_arm\_y 1 3.8827e-07 190

- pitch\_arm 1 4.1461e-07 190

- num\_window 1 6.2164e-07 190

- max\_roll\_arm 1 1.6015e-06 190

<none> 3.3461e-07 192

Step: AIC=190

classe ~ user\_name + raw\_timestamp\_part\_1 + raw\_timestamp\_part\_2 +

cvtd\_timestamp + new\_window + num\_window + roll\_belt + pitch\_belt +

total\_accel\_belt + kurtosis\_roll\_belt + skewness\_roll\_belt +

max\_roll\_belt + max\_yaw\_belt + min\_pitch\_belt + amplitude\_roll\_belt +

var\_total\_accel\_belt + stddev\_pitch\_belt + var\_pitch\_belt +

stddev\_yaw\_belt + var\_yaw\_belt + gyros\_belt\_x + gyros\_belt\_y +

gyros\_belt\_z + accel\_belt\_x + accel\_belt\_y + accel\_belt\_z +

magnet\_belt\_x + magnet\_belt\_y + magnet\_belt\_z + roll\_arm +

pitch\_arm + yaw\_arm + total\_accel\_arm + var\_accel\_arm + avg\_roll\_arm +

stddev\_roll\_arm + avg\_yaw\_arm + stddev\_yaw\_arm + gyros\_arm\_x +

gyros\_arm\_y + gyros\_arm\_z + accel\_arm\_x + accel\_arm\_y + accel\_arm\_z +

magnet\_arm\_x + magnet\_arm\_y + magnet\_arm\_z + kurtosis\_roll\_arm +

max\_roll\_arm + max\_picth\_arm + max\_yaw\_arm + min\_roll\_arm +

min\_yaw\_arm + roll\_dumbbell + pitch\_dumbbell + yaw\_dumbbell +

skewness\_pitch\_dumbbell + max\_roll\_dumbbell + max\_picth\_dumbbell +

min\_pitch\_dumbbell + amplitude\_roll\_dumbbell + amplitude\_pitch\_dumbbell +

total\_accel\_dumbbell + var\_roll\_dumbbell + avg\_pitch\_dumbbell +

gyros\_dumbbell\_x + gyros\_dumbbell\_z + accel\_dumbbell\_x +

accel\_dumbbell\_y + accel\_dumbbell\_z + magnet\_dumbbell\_x +

magnet\_dumbbell\_z + pitch\_forearm + yaw\_forearm + skewness\_pitch\_forearm

+

max\_roll\_forearm + min\_roll\_forearm + min\_pitch\_forearm +

amplitude\_roll\_forearm + total\_accel\_forearm + avg\_roll\_forearm +

stddev\_pitch\_forearm + var\_pitch\_forearm + stddev\_yaw\_forearm +

var\_yaw\_forearm + gyros\_forearm\_x + gyros\_forearm\_y + gyros\_forearm\_z +

accel\_forearm\_x + accel\_forearm\_y + accel\_forearm\_z + magnet\_forearm\_x +

magnet\_forearm\_y + magnet\_forearm\_z

Df Deviance AIC

- amplitude\_pitch\_dumbbell 1 3.3473e-07 188

- max\_picth\_dumbbell 1 3.3473e-07 188

- min\_pitch\_dumbbell 1 3.3473e-07 188

- var\_total\_accel\_belt 1 3.3474e-07 188

- avg\_pitch\_dumbbell 1 3.3475e-07 188

- min\_roll\_forearm 1 3.3475e-07 188

- max\_roll\_forearm 1 3.3475e-07 188

- amplitude\_roll\_forearm 1 3.3475e-07 188

- var\_roll\_dumbbell 1 3.3476e-07 188

- amplitude\_roll\_dumbbell 1 3.3483e-07 188

- avg\_roll\_arm 1 3.3484e-07 188

- yaw\_arm 1 3.3484e-07 188

- magnet\_dumbbell\_z 1 3.3484e-07 188

- new\_window 1 3.3485e-07 188

- var\_pitch\_forearm 1 3.3490e-07 188

- stddev\_roll\_arm 1 3.3491e-07 188

- amplitude\_roll\_belt 1 3.3491e-07 188

- max\_roll\_belt 1 3.3491e-07 188

- min\_pitch\_belt 1 3.3491e-07 188

- stddev\_yaw\_arm 1 3.3493e-07 188

- stddev\_yaw\_belt 1 3.3497e-07 188

- max\_roll\_dumbbell 1 3.3499e-07 188

- skewness\_pitch\_dumbbell 1 3.3500e-07 188

- stddev\_pitch\_belt 1 3.3500e-07 188

- avg\_yaw\_arm 1 3.3502e-07 188

- gyros\_belt\_x 1 3.3503e-07 188

- max\_picth\_arm 1 3.3504e-07 188

- avg\_roll\_forearm 1 3.3506e-07 188

- var\_yaw\_belt 1 3.3506e-07 188

- skewness\_pitch\_forearm 1 3.3509e-07 188

- var\_pitch\_belt 1 3.3514e-07 188

- min\_pitch\_forearm

1

3.3515e

-07 188

- max\_yaw\_arm

1 3.3520e

-07 188

- max\_yaw\_belt

1 3.3522e

-07 188

- kurtosis\_roll\_belt

1 3.3523e

-07 188

- gyros\_dumbbell\_x

1 3.3523e

-07 188

- skewness\_roll\_belt

1 3.3525e

-07 188

- var\_accel\_arm

1 3.3534e

-07 188

- accel\_belt\_z

1 3.3540e

-07 188

- min\_yaw\_arm

1 3.3546e

-07 188

- stddev\_pitch\_forearm

1 3.3548e

-07 188

- kurtosis\_roll\_arm

1 3.3574e

-07 188

- min\_roll\_arm

1 3.3583e

-07 188

- stddev\_yaw\_forearm

1 3.3596e

-07 188

- gyros\_dumbbell\_z

1 3.3609e

-07 188

- total\_accel\_arm

1 3.3617e

-07 188

- magnet\_belt\_y

1 3.3624e

-07 188

- magnet\_forearm\_y

1 3.3633e

-07 188

- gyros\_arm\_x

1

3.3640e

-07 188

- accel\_belt\_x

1 3.3640e

-07 188

- gyros\_forearm\_x

1 3.3645e

-07 188

- max\_roll\_arm

1 3.3655e

-07 188

- roll\_arm

1 3.3673e

-07 188

- yaw\_forearm

1 3.3694e

-07 188

- gyros\_belt\_z

1 3.3701e

-07 188

- gyros\_arm\_y

1 3.3720e

-07 188

- accel\_dumbbell\_z

1 3.3748e

-07 188

- yaw\_dumbbell

1 3.3757e

-07 188

- total\_accel\_forearm

1 3.3768e

-07 188

- magnet\_arm\_x

1 3.3778e

-07 188

-

magnet\_arm\_z

1 3.3796e

-07 188

- roll\_belt

1 3.3802e

-07 188

- accel\_dumbbell\_y

1 3.3808e

-07 188

- magnet\_dumbbell\_x

1 3.3854e

-07 188

- gyros\_arm\_z

1 3.3990e

-07 188

- total\_accel\_dumbbell

1 3.4034e

-07 188

- accel\_belt\_y

1 3.4037e

-07 188

- cvtd\_timestamp

1 3.4094e

-07 188

- user\_name

1 3.4110e

-07 188

- raw\_timestamp\_part\_2

1 3.4222e

-07 188

- total\_accel\_belt

1 3.4234e

-07 188

- magnet\_belt\_x

1 3.4264e

-07 188

- pitch\_belt

1 3.4285e

-07 188

- roll\_dumbbell

1 3.4311e

-07 188

- accel\_dumbbell\_x

1 3.4312e

-07 188

- accel\_forearm\_x

1 3.4328e

-07 188

- gyros\_forearm\_y

1 3.4411e

-07 188

- accel\_forearm\_y

1 3.4425e

-07 188

- gyros\_belt\_y

1 3.4439e

-07 188

- accel\_forearm\_z

1 3.4471e

-07 188

- accel\_arm\_x

1 3.4493e

-07 188

- pitch\_forearm

1 3.4520e

-07 188

- pitch\_dumbbell

1 3.4527e

-07 188

- raw\_timestamp\_part\_1

1 3.4669e

-07 188

- magnet\_belt\_z

1 3.4680e

-07 188

- gyros\_forearm\_z

1 3.4968e

-07 188

- accel\_arm\_z

1 3.5254e

-07 188

- magnet\_forearm\_x

1 3.5907e

-07 188

- magnet\_forearm\_z 1 3.6708e-07 188

- magnet\_arm\_y 1 3.8388e-07 188

- accel\_arm\_y 1 3.8846e-07 188

- pitch\_arm 1 4.1482e-07 188

- num\_window 1 6.2167e-07 188

- var\_yaw\_forearm 1 1.0529e-06 188

<none> 3.3466e-07 190

Step: AIC=188

classe ~ user\_name + raw\_timestamp\_part\_1 + raw\_timestamp\_part\_2 +

cvtd\_timestamp + new\_window + num\_window + roll\_belt + pitch\_belt +

total\_accel\_belt + kurtosis\_roll\_belt + skewness\_roll\_belt +

max\_roll\_belt + max\_yaw\_belt + min\_pitch\_belt + amplitude\_roll\_belt +

var\_total\_accel\_belt + stddev\_pitch\_belt + var\_pitch\_belt +

stddev\_yaw\_belt + var\_yaw\_belt + gyros\_belt\_x + gyros\_belt\_y +

gyros\_belt\_z + accel\_belt\_x + accel\_belt\_y + accel\_belt\_z +

magnet\_belt\_x + magnet\_belt\_y + magnet\_belt\_z + roll\_arm +

pitch\_arm + yaw\_arm + total\_accel\_arm + var\_accel\_arm + avg\_roll\_arm +

stddev\_roll\_arm + avg\_yaw\_arm + stddev\_yaw\_arm + gyros\_arm\_x +

gyros\_arm\_y + gyros\_arm\_z + accel\_arm\_x + accel\_arm\_y + accel\_arm\_z +

magnet\_arm\_x + magnet\_arm\_y + magnet\_arm\_z + kurtosis\_roll\_arm +

max\_roll\_arm + max\_picth\_arm + max\_yaw\_arm + min\_roll\_arm +

min\_yaw\_arm + roll\_dumbbell + pitch\_dumbbell + yaw\_dumbbell +

skewness\_pitch\_dumbbell + max\_roll\_dumbbell + max\_picth\_dumbbell +

min\_pitch\_dumbbell + amplitude\_roll\_dumbbell + total\_accel\_dumbbell +

var\_roll\_dumbbell + avg\_pitch\_dumbbell + gyros\_dumbbell\_x +

gyros\_dumbbell\_z + accel\_dumbbell\_x + accel\_dumbbell\_y +

accel\_dumbbell\_z + magnet\_dumbbell\_x + magnet\_dumbbell\_z +

pitch\_forearm + yaw\_forearm + skewness\_pitch\_forearm + max\_roll\_forearm +

min\_roll\_forearm + min\_pitch\_forearm + amplitude\_roll\_forearm +

total\_accel\_forearm + avg\_roll\_forearm + stddev\_pitch\_forearm +

var\_pitch\_forearm + stddev\_yaw\_forearm + var\_yaw\_forearm +

gyros\_forearm\_x + gyros\_forearm\_y + gyros\_forearm\_z + accel\_forearm\_x +

accel\_forearm\_y + accel\_forearm\_z + magnet\_forearm\_x + magnet\_forearm\_y +

magnet\_forearm\_z

Df Deviance AIC

- avg\_pitch\_dumbbell 1 3.3476e-07 186

- min\_roll\_forearm 1 3.3479e-07 186

- max\_roll\_forearm 1 3.3479e-07 186

- amplitude\_roll\_forearm 1 3.3479e-07 186

- var\_total\_accel\_belt 1 3.3480e-07 186

- new\_window 1 3.3483e-07 186

- var\_roll\_dumbbell 1 3.3486e-07 186

- magnet\_dumbbell\_z 1 3.3487e-07 186

- max\_picth\_dumbbell 1 3.3488e-07 186

- yaw\_arm 1 3.3488e-07 186

- amplitude\_roll\_dumbbell 1 3.3490e-07 186

- min\_pitch\_belt 1 3.3491e-07 186

- avg\_roll\_arm 1 3.3491e-07 186

- max\_roll\_belt 1 3.3492e-07 186

- stddev\_yaw\_arm 1 3.3494e-07 186

- stddev\_pitch\_belt 1 3.3495e-07 186

- amplitude\_roll\_belt 1 3.3496e-07 186

- skewness\_pitch\_dumbbell 1 3.3496e-07 186

- var\_pitch\_forearm 1 3.3497e-07 186

- stddev\_roll\_arm 1 3.3501e-07 186

- max\_roll\_dumbbell 1 3.3501e-07 186

- stddev\_yaw\_belt 1 3.3501e-07 186

- avg\_yaw\_arm 1 3.3502e-07 186

- min\_pitch\_dumbbell 1 3.3505e-07 186

- max\_picth\_arm 1 3.3507e-07 186

- avg\_roll\_forearm 1 3.3507e-07 186

- skewness\_pitch\_forearm 1 3.3508e-07 186

- gyros\_belt\_x 1 3.3509e-07 186

- var\_yaw\_belt 1 3.3510e-07 186

- var\_pitch\_belt 1 3.3514e-07 186

- max\_yaw\_arm 1 3.3522e-07 186

- skewness\_roll\_belt 1 3.3524e-07 186

- min\_pitch\_forearm 1 3.3526e-07 186

- gyros\_dumbbell\_x 1 3.3532e-07 186

- max\_yaw\_belt 1 3.3535e-07 186

- kurtosis\_roll\_belt 1 3.3536e-07 186

- var\_accel\_arm 1 3.3542e-07 186

- min\_yaw\_arm 1 3.3545e-07 186

- accel\_belt\_z 1 3.3546e-07 186

- stddev\_pitch\_forearm 1 3.3549e-07 186

- min\_roll\_arm 1 3.3585e-07 186

- kurtosis\_roll\_arm 1 3.3596e-07 186

- stddev\_yaw\_forearm 1 3.3600e-07 186

- gyros\_dumbbell\_z 1 3.3609e-07 186

- total\_accel\_arm 1 3.3617e-07 186

- magnet\_belt\_y 1 3.3624e-07 186

- accel\_belt\_x 1 3.3641e-07 186

- gyros\_arm\_x 1 3.3642e-07 186

- magnet\_forearm\_y 1 3.3645e-07 186

- gyros\_forearm\_x 1 3.3649e-07 186

- max\_roll\_arm 1 3.3654e-07 186

- var\_yaw\_forearm 1 3.3672e-07 186

- roll\_arm 1 3.3675e-07 186

- yaw\_forearm 1 3.3696e-07 186

- gyros\_belt\_z 1 3.3705e-07 186

- gyros\_arm\_y 1 3.3723e-07 186

- accel\_dumbbell\_z 1 3.3746e-07 186

- yaw\_dumbbell 1 3.3760e-07 186

- total\_accel\_forearm 1 3.3775e-07 186

- magnet\_arm\_x 1 3.3782e-07 186

- magnet\_arm\_z 1 3.3795e-07 186

- roll\_belt 1 3.3806e-07 186

- accel\_dumbbell\_y 1 3.3809e-07 186

- magnet\_dumbbell\_x 1 3.3866e-07 186

- gyros\_arm\_z 1 3.3991e-07 186

- accel\_belt\_y 1 3.4036e-07 186

- total\_accel\_dumbbell 1 3.4044e-07 186

- cvtd\_timestamp 1 3.4093e-07 186

- user\_name 1 3.4113e-07 186

- raw\_timestamp\_part\_2 1 3.4221e-07 186

- total\_accel\_belt 1 3.4233e-07 186

- magnet\_belt\_x 1 3.4265e-07 186

- pitch\_belt 1 3.4293e-07 186

- roll\_dumbbell 1 3.4309e-07 186

- accel\_dumbbell\_x 1 3.4313e-07 186

- accel\_forearm\_x 1 3.4333e-07 186

- gyros\_forearm\_y 1 3.4410e-07 186

- accel\_forearm\_y 1 3.4427e-07 186

- gyros\_belt\_y 1 3.4448e-07 186

- accel\_forearm\_z 1 3.4471e-07 186

- accel\_arm\_x 1 3.4502e-07 186

- pitch\_forearm 1 3.4518e-07 186

- pitch\_dumbbell 1 3.4529e-07 186

- raw\_timestamp\_part\_1 1 3.4668e-07 186

- magnet\_belt\_z 1 3.4692e-07 186

- gyros\_forearm\_z 1 3.4968e-07 186

- accel\_arm\_z 1 3.5253e-07 186

- magnet\_forearm\_x 1 3.5904e-07 186

- magnet\_forearm\_z 1 3.6710e-07 186

- magnet\_arm\_y 1 3.8388e-07 186

- accel\_arm\_y 1 3.8846e-07 186

- pitch\_arm 1 4.1484e-07 186

- num\_window 1 6.2179e-07 186

<none> 3.3473e-07 188

Step: AIC=186

classe ~ user\_name + raw\_timestamp\_part\_1 + raw\_timestamp\_part\_2 +

cvtd\_timestamp + new\_window + num\_window + roll\_belt + pitch\_belt +

total\_accel\_belt + kurtosis\_roll\_belt + skewness\_roll\_belt +

max\_roll\_belt + max\_yaw\_belt + min\_pitch\_belt + amplitude\_roll\_belt +

var\_total\_accel\_belt + stddev\_pitch\_belt + var\_pitch\_belt +

stddev\_yaw\_belt + var\_yaw\_belt + gyros\_belt\_x + gyros\_belt\_y +

gyros\_belt\_z + accel\_belt\_x + accel\_belt\_y + accel\_belt\_z +

magnet\_belt\_x + magnet\_belt\_y + magnet\_belt\_z + roll\_arm +

pitch\_arm + yaw\_arm + total\_accel\_arm + var\_accel\_arm + avg\_roll\_arm +

stddev\_roll\_arm + avg\_yaw\_arm + stddev\_yaw\_arm + gyros\_arm\_x +

gyros\_arm\_y + gyros\_arm\_z + accel\_arm\_x + accel\_arm\_y + accel\_arm\_z +

magnet\_arm\_x + magnet\_arm\_y + magnet\_arm\_z + kurtosis\_roll\_arm +

max\_roll\_arm + max\_picth\_arm + max\_yaw\_arm + min\_roll\_arm +

min\_yaw\_arm + roll\_dumbbell + pitch\_dumbbell + yaw\_dumbbell +

skewness\_pitch\_dumbbell + max\_roll\_dumbbell + max\_picth\_dumbbell +

min\_pitch\_dumbbell + amplitude\_roll\_dumbbell + total\_accel\_dumbbell +

var\_roll\_dumbbell + gyros\_dumbbell\_x + gyros\_dumbbell\_z +

accel\_dumbbell\_x + accel\_dumbbell\_y + accel\_dumbbell\_z +

magnet\_dumbbell\_x + magnet\_dumbbell\_z + pitch\_forearm + yaw\_forearm +

skewness\_pitch\_forearm + max\_roll\_forearm + min\_roll\_forearm +

min\_pitch\_forearm + amplitude\_roll\_forearm + total\_accel\_forearm +

avg\_roll\_forearm + stddev\_pitch\_forearm + var\_pitch\_forearm +

stddev\_yaw\_forearm + var\_yaw\_forearm + gyros\_forearm\_x +

gyros\_forearm\_y + gyros\_forearm\_z + accel\_forearm\_x + accel\_forearm\_y +

accel\_forearm\_z + magnet\_forearm\_x + magnet\_forearm\_y + magnet\_forearm\_z

Df Deviance AIC

- min\_roll\_forearm 1 3.3480e-07 184

- max\_roll\_forearm 1 3.3480e-07 184

- amplitude\_roll\_forearm 1 3.3480e-07 184

- var\_total\_accel\_belt 1 3.3487e-07 184

- var\_roll\_dumbbell 1 3.3488e-07 184

- max\_picth\_dumbbell 1 3.3489e-07 184

- amplitude\_roll\_dumbbell 1 3.3491e-07 184

- yaw\_arm 1 3.3491e-07 184

- avg\_roll\_arm 1 3.3493e-07 184

- magnet\_dumbbell\_z 1 3.3494e-07 184

- var\_pitch\_forearm 1 3.3494e-07 184

- stddev\_pitch\_belt 1 3.3499e-07 184

- amplitude\_roll\_belt 1 3.3499e-07 184

- stddev\_yaw\_arm 1 3.3499e-07 184

- avg\_yaw\_arm 1 3.3501e-07 184

- stddev\_roll\_arm 1 3.3501e-07 184

- avg\_roll\_forearm 1 3.3503e-07 184

- stddev\_yaw\_belt 1 3.3504e-07 184

- new\_window 1 3.3504e-07 184

- min\_pitch\_dumbbell 1 3.3505e-07 184

- max\_picth\_arm 1 3.3507e-07 184

- max\_roll\_belt 1 3.3508e-07 184

- var\_yaw\_belt 1 3.3509e-07 184

- max\_roll\_dumbbell 1 3.3510e-07 184

- gyros\_belt\_x 1 3.3512e-07 184

- skewness\_pitch\_forearm 1 3.3513e-07 184

- var\_pitch\_belt 1 3.3513e-07 184

- skewness\_pitch\_dumbbell 1 3.3520e-07 184

- skewness\_roll\_belt 1 3.3523e-07 184

- min\_pitch\_belt 1 3.3525e-07 184

- max\_yaw\_arm 1 3.3528e-07 184

- min\_pitch\_forearm 1 3.3530e-07 184

- gyros\_dumbbell\_x 1 3.3535e-07 184

- var\_accel\_arm 1 3.3546e-07 184

- max\_yaw\_belt 1 3.3547e-07 184

- accel\_belt\_z 1 3.3548e-07 184

- kurtosis\_roll\_belt 1 3.3548e-07 184

- min\_yaw\_arm 1 3.3573e-07 184

- min\_roll\_arm 1 3.3587e-07 184

- kurtosis\_roll\_arm 1 3.3592e-07 184

- stddev\_pitch\_forearm 1 3.3598e-07 184

- var\_yaw\_forearm 1 3.3599e-07 184

- stddev\_yaw\_forearm 1 3.3601e-07 184

- gyros\_dumbbell\_z 1 3.3615e-07 184

- total\_accel\_arm 1 3.3623e-07 184

- magnet\_belt\_y 1 3.3632e-07 184

- magnet\_forearm\_y 1 3.3644e-07 184

- accel\_belt\_x 1 3.3649e-07 184

- gyros\_arm\_x 1 3.3650e-07 184

- gyros\_forearm\_x 1 3.3652e-07 184

- max\_roll\_arm 1 3.3662e-07 184

- roll\_arm 1 3.3676e-07 184

- yaw\_forearm 1 3.3703e-07 184

- gyros\_belt\_z 1 3.3712e-07 184

- gyros\_arm\_y 1 3.3731e-07 184

- accel\_dumbbell\_z 1 3.3754e-07 184

- yaw\_dumbbell 1 3.3777e-07 184

- total\_accel\_forearm 1 3.3778e-07 184

- magnet\_arm\_x 1 3.3789e-07 184

- magnet\_arm\_z 1 3.3804e-07 184

- accel\_dumbbell\_y 1 3.3814e-07 184

- roll\_belt 1 3.3818e-07 184

- magnet\_dumbbell\_x 1 3.3872e-07 184

- gyros\_arm\_z 1 3.4003e-07 184

- accel\_belt\_y 1 3.4036e-07 184

- total\_accel\_dumbbell 1 3.4050e-07 184

- cvtd\_timestamp 1 3.4098e-07 184

- user\_name 1 3.4119e-07 184

- raw\_timestamp\_part\_2 1 3.4238e-07 184

- total\_accel\_belt 1 3.4239e-07 184

- magnet\_belt\_x 1 3.4274e-07 184

- pitch\_belt 1 3.4302e-07 184

- accel\_dumbbell\_x 1 3.4329e-07 184

- roll\_dumbbell 1 3.4332e-07 184

- accel\_forearm\_x 1 3.4339e-07 184

- gyros\_forearm\_y 1 3.4416e-07 184

- accel\_forearm\_y 1 3.4430e-07 184

- gyros\_belt\_y 1 3.4450e-07 184

- accel\_forearm\_z 1 3.4473e-07 184

- accel\_arm\_x 1 3.4505e-07 184

- pitch\_forearm 1 3.4529e-07 184

- pitch\_dumbbell 1 3.4535e-07 184

- raw\_timestamp\_part\_1 1 3.4672e-07 184

- magnet\_belt\_z 1 3.4696e-07 184

- gyros\_forearm\_z 1 3.4980e-07 184

- accel\_arm\_z 1 3.5273e-07 184

- magnet\_forearm\_x 1 3.5907e-07 184

- magnet\_forearm\_z 1 3.6712e-07 184

- magnet\_arm\_y 1 3.8420e-07 184

- accel\_arm\_y 1 3.8869e-07 184

- pitch\_arm 1 4.1492e-07 184

- num\_window 1 6.2241e-07 184

<none> 3.3476e-07 186

Step: AIC=184

classe ~ user\_name + raw\_timestamp\_part\_1 + raw\_timestamp\_part\_2 +

cvtd\_timestamp + new\_window + num\_window + roll\_belt + pitch\_belt +

total\_accel\_belt + kurtosis\_roll\_belt + skewness\_roll\_belt +

max\_roll\_belt + max\_yaw\_belt + min\_pitch\_belt + amplitude\_roll\_belt +

var\_total\_accel\_belt + stddev\_pitch\_belt + var\_pitch\_belt +

stddev\_yaw\_belt + var\_yaw\_belt + gyros\_belt\_x + gyros\_belt\_y +

gyros\_belt\_z + accel\_belt\_x + accel\_belt\_y + accel\_belt\_z +

magnet\_belt\_x + magnet\_belt\_y + magnet\_belt\_z + roll\_arm +

pitch\_arm + yaw\_arm + total\_accel\_arm + var\_accel\_arm + avg\_roll\_arm +

stddev\_roll\_arm + avg\_yaw\_arm + stddev\_yaw\_arm + gyros\_arm\_x +

gyros\_arm\_y + gyros\_arm\_z + accel\_arm\_x + accel\_arm\_y + accel\_arm\_z +

magnet\_arm\_x + magnet\_arm\_y + magnet\_arm\_z + kurtosis\_roll\_arm +

max\_roll\_arm + max\_picth\_arm + max\_yaw\_arm + min\_roll\_arm +

min\_yaw\_arm + roll\_dumbbell + pitch\_dumbbell + yaw\_dumbbell +

skewness\_pitch\_dumbbell + max\_roll\_dumbbell + max\_picth\_dumbbell +

min\_pitch\_dumbbell + amplitude\_roll\_dumbbell + total\_accel\_dumbbell +

var\_roll\_dumbbell + gyros\_dumbbell\_x + gyros\_dumbbell\_z +

accel\_dumbbell\_x + accel\_dumbbell\_y + accel\_dumbbell\_z +

magnet\_dumbbell\_x + magnet\_dumbbell\_z + pitch\_forearm + yaw\_forearm +

skewness\_pitch\_forearm + max\_roll\_forearm + min\_pitch\_forearm +

amplitude\_roll\_forearm + total\_accel\_forearm + avg\_roll\_forearm +

stddev\_pitch\_forearm + var\_pitch\_forearm + stddev\_yaw\_forearm +

var\_yaw\_forearm + gyros\_forearm\_x + gyros\_forearm\_y + gyros\_forearm\_z +

accel\_forearm\_x + accel\_forearm\_y + accel\_forearm\_z + magnet\_forearm\_x +

magnet\_forearm\_y + magnet\_forearm\_z

Df Deviance AIC

- max\_roll\_forearm 1 3.3483e-07 182

- var\_total\_accel\_belt 1 3.3486e-07 182

- var\_pitch\_forearm 1 3.3493e-07 182

- yaw\_arm 1 3.3494e-07 182

- max\_picth\_dumbbell 1 3.3494e-07 182

- amplitude\_roll\_dumbbell 1 3.3495e-07 182

- avg\_roll\_arm 1 3.3496e-07 182

- var\_roll\_dumbbell 1 3.3496e-07 182

- magnet\_dumbbell\_z 1 3.3497e-07 182

- stddev\_pitch\_belt 1 3.3498e-07 182

- amplitude\_roll\_belt 1 3.3501e-07 182

- stddev\_yaw\_arm 1 3.3504e-07 182

- stddev\_roll\_arm 1 3.3504e-07 182

- avg\_roll\_forearm 1 3.3506e-07 182

- stddev\_yaw\_belt 1 3.3506e-07 182

- avg\_yaw\_arm 1 3.3507e-07 182

- max\_roll\_belt 1 3.3509e-07 182

- new\_window 1 3.3510e-07 182

- max\_picth\_arm 1 3.3510e-07 182

- min\_pitch\_dumbbell 1 3.3511e-07 182

- var\_yaw\_belt 1 3.3512e-07 182

- var\_pitch\_belt 1 3.3513e-07 182

- gyros\_belt\_x 1 3.3515e-07 182

- skewness\_pitch\_forearm 1 3.3519e-07 182

- skewness\_pitch\_dumbbell 1 3.3522e-07 182

- skewness\_roll\_belt 1 3.3525e-07 182

- min\_pitch\_belt 1 3.3530e-07 182

- amplitude\_roll\_forearm 1 3.3534e-07 182

- min\_pitch\_forearm 1 3.3535e-07 182

- max\_yaw\_arm 1 3.3536e-07 182

- gyros\_dumbbell\_x 1 3.3540e-07 182

- max\_yaw\_belt 1 3.3546e-07 182

- kurtosis\_roll\_belt 1 3.3546e-07 182

- var\_accel\_arm 1 3.3552e-07 182

- accel\_belt\_z 1 3.3553e-07 182

- stddev\_pitch\_forearm 1 3.3556e-07 182

- max\_roll\_dumbbell 1 3.3571e-07 182

- min\_yaw\_arm 1 3.3575e-07 182

- kurtosis\_roll\_arm 1 3.3594e-07 182

- min\_roll\_arm 1 3.3602e-07 182

- var\_yaw\_forearm 1 3.3605e-07 182

- stddev\_yaw\_forearm 1 3.3606e-07 182

- gyros\_dumbbell\_z 1 3.3619e-07 182

- total\_accel\_arm 1 3.3624e-07 182

- magnet\_belt\_y 1 3.3636e-07 182

- magnet\_forearm\_y 1 3.3649e-07 182

- accel\_belt\_x 1 3.3653e-07 182

- gyros\_arm\_x 1 3.3653e-07 182

- gyros\_forearm\_x 1 3.3657e-07 182

- max\_roll\_arm 1 3.3661e-07 182

- roll\_arm 1 3.3685e-07 182

- yaw\_forearm 1 3.3710e-07 182

- gyros\_belt\_z 1 3.3715e-07 182

- gyros\_arm\_y 1 3.3735e-07 182

- accel\_dumbbell\_z 1 3.3758e-07 182

- yaw\_dumbbell 1 3.3776e-07 182

- total\_accel\_forearm 1 3.3783e-07 182

- magnet\_arm\_x 1 3.3796e-07 182

- magnet\_arm\_z 1 3.3807e-07 182

- roll\_belt 1 3.3820e-07 182

- accel\_dumbbell\_y 1 3.3821e-07 182

- magnet\_dumbbell\_x 1 3.3875e-07 182

- gyros\_arm\_z 1 3.4003e-07 182

- accel\_belt\_y 1 3.4040e-07 182

- total\_accel\_dumbbell 1 3.4059e-07 182

- cvtd\_timestamp 1 3.4096e-07 182

- user\_name 1 3.4128e-07 182

- raw\_timestamp\_part\_2 1 3.4238e-07 182

- total\_accel\_belt 1 3.4248e-07 182

- magnet\_belt\_x 1 3.4282e-07 182

- pitch\_belt 1 3.4309e-07 182

- roll\_dumbbell 1 3.4342e-07 182

- accel\_dumbbell\_x 1 3.4344e-07 182

- accel\_forearm\_x 1 3.4345e-07 182

- gyros\_forearm\_y 1 3.4421e-07 182

- accel\_forearm\_y 1 3.4434e-07 182

- gyros\_belt\_y 1 3.4457e-07 182

- accel\_forearm\_z 1 3.4481e-07 182

- accel\_arm\_x 1 3.4505e-07 182

- pitch\_forearm 1 3.4529e-07 182

- pitch\_dumbbell 1 3.4547e-07 182

- raw\_timestamp\_part\_1 1 3.4678e-07 182

- magnet\_belt\_z 1 3.4706e-07 182

- gyros\_forearm\_z 1 3.4984e-07 182

- accel\_arm\_z 1 3.5279e-07 182

- magnet\_forearm\_x 1 3.5916e-07 182

- magnet\_forearm\_z 1 3.6741e-07 182

- magnet\_arm\_y 1 3.8420e-07 182

- accel\_arm\_y 1 3.8879e-07 182

- pitch\_arm 1 4.1498e-07 182

- num\_window 1 6.2255e-07 182

<none> 3.3480e-07 184

Step: AIC=182

classe ~ user\_name + raw\_timestamp\_part\_1 + raw\_timestamp\_part\_2 +

cvtd\_timestamp + new\_window + num\_window + roll\_belt + pitch\_belt +

total\_accel\_belt + kurtosis\_roll\_belt + skewness\_roll\_belt +

max\_roll\_belt + max\_yaw\_belt + min\_pitch\_belt + amplitude\_roll\_belt +

var\_total\_accel\_belt + stddev\_pitch\_belt + var\_pitch\_belt +

stddev\_yaw\_belt + var\_yaw\_belt + gyros\_belt\_x + gyros\_belt\_y +

gyros\_belt\_z + accel\_belt\_x + accel\_belt\_y + accel\_belt\_z +

magnet\_belt\_x + magnet\_belt\_y + magnet\_belt\_z + roll\_arm +

pitch\_arm + yaw\_arm + total\_accel\_arm + var\_accel\_arm + avg\_roll\_arm +

stddev\_roll\_arm + avg\_yaw\_arm + stddev\_yaw\_arm + gyros\_arm\_x +

gyros\_arm\_y + gyros\_arm\_z + accel\_arm\_x + accel\_arm\_y + accel\_arm\_z +

magnet\_arm\_x + magnet\_arm\_y + magnet\_arm\_z + kurtosis\_roll\_arm +

max\_roll\_arm + max\_picth\_arm + max\_yaw\_arm + min\_roll\_arm +

min\_yaw\_arm + roll\_dumbbell + pitch\_dumbbell + yaw\_dumbbell +

skewness\_pitch\_dumbbell + max\_roll\_dumbbell + max\_picth\_dumbbell +

min\_pitch\_dumbbell + amplitude\_roll\_dumbbell + total\_accel\_dumbbell +

var\_roll\_dumbbell + gyros\_dumbbell\_x + gyros\_dumbbell\_z +

accel\_dumbbell\_x + accel\_dumbbell\_y + accel\_dumbbell\_z +

magnet\_dumbbell\_x + magnet\_dumbbell\_z + pitch\_forearm + yaw\_forearm +

skewness\_pitch\_forearm + min\_pitch\_forearm + amplitude\_roll\_forearm +

total\_accel\_forearm + avg\_roll\_forearm + stddev\_pitch\_forearm +

var\_pitch\_forearm + stddev\_yaw\_forearm + var\_yaw\_forearm +

gyros\_forearm\_x + gyros\_forearm\_y + gyros\_forearm\_z + accel\_forearm\_x +

accel\_forearm\_y + accel\_forearm\_z + magnet\_forearm\_x + magnet\_forearm\_y +

magnet\_forearm\_z

Df Deviance AIC

- var\_total\_accel\_belt 1 3.3487e-07 180

- max\_picth\_dumbbell 1 3.3495e-07 180

- yaw\_arm 1 3.3495e-07 180

- avg\_roll\_arm 1 3.3496e-07 180

- amplitude\_roll\_dumbbell 1 3.3497e-07 180

- var\_roll\_dumbbell 1 3.3498e-07 180

- var\_pitch\_forearm 1 3.3498e-07 180

- stddev\_pitch\_belt 1 3.3499e-07 180

- magnet\_dumbbell\_z 1 3.3499e-07 180

- amplitude\_roll\_belt 1 3.3502e-07 180

- stddev\_roll\_arm 1 3.3504e-07 180

- stddev\_yaw\_arm 1 3.3505e-07 180

- stddev\_yaw\_belt 1 3.3507e-07 180

- new\_window 1 3.3509e-07 180

- max\_roll\_belt 1 3.3510e-07 180

- max\_picth\_arm 1 3.3512e-07 180

- var\_yaw\_belt 1 3.3512e-07 180

- avg\_roll\_forearm 1 3.3513e-07 180

- avg\_yaw\_arm 1 3.3513e-07 180

- var\_pitch\_belt 1 3.3514e-07 180

- min\_pitch\_dumbbell 1 3.3517e-07 180

- gyros\_belt\_x 1 3.3518e-07 180

- skewness\_pitch\_dumbbell 1 3.3525e-07 180

- skewness\_pitch\_forearm 1 3.3528e-07 180

- skewness\_roll\_belt 1 3.3529e-07 180

- min\_pitch\_belt 1 3.3529e-07 180

- max\_yaw\_arm 1 3.3536e-07 180

- min\_pitch\_forearm 1 3.3542e-07 180

- gyros\_dumbbell\_x 1 3.3544e-07 180

- amplitude\_roll\_forearm 1 3.3544e-07 180

- max\_yaw\_belt 1 3.3547e-07 180

- kurtosis\_roll\_belt 1 3.3548e-07 180

- var\_accel\_arm 1 3.3556e-07 180

- accel\_belt\_z 1 3.3556e-07 180

- stddev\_pitch\_forearm 1 3.3559e-07 180

- min\_yaw\_arm 1 3.3578e-07 180

- var\_yaw\_forearm 1 3.3602e-07 180

- stddev\_yaw\_forearm 1 3.3604e-07 180

- kurtosis\_roll\_arm 1 3.3605e-07 180

- gyros\_dumbbell\_z 1 3.3621e-07 180

- total\_accel\_arm 1 3.3622e-07 180

- min\_roll\_arm 1 3.3625e-07 180

- magnet\_belt\_y 1 3.3638e-07 180

- gyros\_arm\_x 1 3.3651e-07 180

- magnet\_forearm\_y 1 3.3655e-07 180

- accel\_belt\_x 1 3.3655e-07 180

- gyros\_forearm\_x 1 3.3660e-07 180

- max\_roll\_arm 1 3.3680e-07 180

- roll\_arm 1 3.3690e-07 180

- gyros\_belt\_z 1 3.3714e-07 180

- yaw\_forearm 1 3.3716e-07 180

- gyros\_arm\_y 1 3.3735e-07 180

- accel\_dumbbell\_z 1 3.3760e-07 180

- yaw\_dumbbell 1 3.3775e-07 180

- total\_accel\_forearm 1 3.3791e-07 180

- magnet\_arm\_x 1 3.3795e-07 180

- magnet\_arm\_z 1 3.3811e-07 180

- roll\_belt 1 3.3818e-07 180

- accel\_dumbbell\_y 1 3.3821e-07 180

- magnet\_dumbbell\_x 1 3.3880e-07 180

- gyros\_arm\_z 1 3.4003e-07 180

- accel\_belt\_y 1 3.4042e-07 180

- total\_accel\_dumbbell 1 3.4061e-07 180

- cvtd\_timestamp 1 3.4097e-07 180

- user\_name 1 3.4124e-07 180

- raw\_timestamp\_part\_2 1 3.4238e-07 180

- total\_accel\_belt 1 3.4248e-07 180

- magnet\_belt\_x 1 3.4279e-07 180

- max\_roll\_dumbbell 1 3.4306e-07 180

- pitch\_belt 1 3.4307e-07 180

- roll\_dumbbell 1 3.4344e-07 180

- accel\_dumbbell\_x 1 3.4345e-07 180

- accel\_forearm\_x 1 3.4349e-07 180

- gyros\_forearm\_y 1 3.4418e-07 180

- accel\_forearm\_y 1 3.4427e-07 180

- gyros\_belt\_y 1 3.4460e-07 180

- accel\_forearm\_z 1 3.4484e-07 180

- accel\_arm\_x 1 3.4504e-07 180

- pitch\_forearm 1 3.4537e-07 180

- pitch\_dumbbell 1 3.4546e-07 180

- raw\_timestamp\_part\_1 1 3.4671e-07 180

- magnet\_belt\_z 1 3.4710e-07 180

- gyros\_forearm\_z 1 3.4984e-07 180

- accel\_arm\_z 1 3.5278e-07 180

- magnet\_forearm\_x 1 3.5914e-07 180

- magnet\_forearm\_z 1 3.6738e-07 180

- magnet\_arm\_y 1 3.8433e-07 180

- accel\_arm\_y 1 3.8879e-07 180

- pitch\_arm 1 4.1501e-07 180

- num\_window 1 6.2250e-07 180

<none> 3.3483e-07 182

Step: AIC=180

classe ~ user\_name + raw\_timestamp\_part\_1 + raw\_timestamp\_part\_2 +

cvtd\_timestamp + new\_window + num\_window + roll\_belt + pitch\_belt +

total\_accel\_belt + kurtosis\_roll\_belt + skewness\_roll\_belt +

max\_roll\_belt + max\_yaw\_belt + min\_pitch\_belt + amplitude\_roll\_belt +

stddev\_pitch\_belt + var\_pitch\_belt + stddev\_yaw\_belt + var\_yaw\_belt +

gyros\_belt\_x + gyros\_belt\_y + gyros\_belt\_z + accel\_belt\_x +

accel\_belt\_y + accel\_belt\_z + magnet\_belt\_x + magnet\_belt\_y +

magnet\_belt\_z + roll\_arm + pitch\_arm + yaw\_arm + total\_accel\_arm +

var\_accel\_arm + avg\_roll\_arm + stddev\_roll\_arm + avg\_yaw\_arm +

stddev\_yaw\_arm + gyros\_arm\_x + gyros\_arm\_y + gyros\_arm\_z +

accel\_arm\_x + accel\_arm\_y + accel\_arm\_z + magnet\_arm\_x +

magnet\_arm\_y + magnet\_arm\_z + kurtosis\_roll\_arm + max\_roll\_arm +

max\_picth\_arm + max\_yaw\_arm + min\_roll\_arm + min\_yaw\_arm +

roll\_dumbbell + pitch\_dumbbell + yaw\_dumbbell + skewness\_pitch\_dumbbell +

max\_roll\_dumbbell + max\_picth\_dumbbell + min\_pitch\_dumbbell +

amplitude\_roll\_dumbbell + total\_accel\_dumbbell + var\_roll\_dumbbell +

gyros\_dumbbell\_x + gyros\_dumbbell\_z + accel\_dumbbell\_x +

accel\_dumbbell\_y + accel\_dumbbell\_z + magnet\_dumbbell\_x +

magnet\_dumbbell\_z + pitch\_forearm + yaw\_forearm + skewness\_pitch\_forearm

+

min\_pitch\_forearm + amplitude\_roll\_forearm + total\_accel\_forearm +

avg\_roll\_forearm + stddev\_pitch\_forearm + var\_pitch\_forearm +

stddev\_yaw\_forearm + var\_yaw\_forearm + gyros\_forearm\_x +

gyros\_forearm\_y + gyros\_forearm\_z + accel\_forearm\_x + accel\_forearm\_y +

accel\_forearm\_z + magnet\_forearm\_x + magnet\_forearm\_y + magnet\_forearm\_z

Df Deviance AIC

- max\_picth\_dumbbell 1 3.3497e-07 178

- stddev\_pitch\_belt 1 3.3500e-07 178

- amplitude\_roll\_belt 1 3.3501e-07 178

- yaw\_arm 1 3.3501e-07 178

- var\_roll\_dumbbell 1 3.3502e-07 178

- magnet\_dumbbell\_z 1 3.3505e-07 178

- amplitude\_roll\_dumbbell 1 3.3506e-07 178

- stddev\_yaw\_belt 1 3.3507e-07 178

- new\_window 1 3.3509e-07 178

- avg\_roll\_arm 1 3.3510e-07 178

- max\_roll\_belt 1 3.3510e-07 178

- var\_pitch\_forearm 1 3.3511e-07 178

- var\_pitch\_belt 1 3.3512e-07 178

- stddev\_roll\_arm 1 3.3514e-07 178

- var\_yaw\_belt 1 3.3516e-07 178

- min\_pitch\_dumbbell 1 3.3517e-07 178

- avg\_yaw\_arm 1 3.3519e-07 178

- stddev\_yaw\_arm 1 3.3523e-07 178

- skewness\_pitch\_dumbbell 1 3.3525e-07 178

- avg\_roll\_forearm 1 3.3527e-07 178

- skewness\_roll\_belt 1 3.3529e-07 178

- max\_picth\_arm 1 3.3529e-07 178

- gyros\_belt\_x 1 3.3532e-07 178

- min\_pitch\_belt 1 3.3532e-07 178

- skewness\_pitch\_forearm 1 3.3534e-07 178

- max\_roll\_dumbbell 1 3.3542e-07 178

- max\_yaw\_belt 1 3.3545e-07 178

- amplitude\_roll\_forearm 1 3.3545e-07 178

- kurtosis\_roll\_belt 1 3.3546e-07 178

- gyros\_dumbbell\_x 1 3.3550e-07 178

- max\_yaw\_arm 1 3.3552e-07 178

- min\_pitch\_forearm 1 3.3555e-07 178

- stddev\_pitch\_forearm 1 3.3562e-07 178

- accel\_belt\_z 1 3.3566e-07 178

- var\_accel\_arm 1 3.3570e-07 178

- min\_yaw\_arm 1 3.3588e-07 178

- var\_yaw\_forearm 1 3.3603e-07 178

- kurtosis\_roll\_arm 1 3.3609e-07 178

- stddev\_yaw\_forearm 1 3.3609e-07 178

- gyros\_dumbbell\_z 1 3.3620e-07 178

- min\_roll\_arm 1 3.3630e-07 178

- total\_accel\_arm 1 3.3639e-07 178

- magnet\_belt\_y 1 3.3644e-07 178

- magnet\_forearm\_y 1 3.3655e-07 178

- gyros\_arm\_x 1 3.3658e-07 178

- accel\_belt\_x 1 3.3666e-07 178

- gyros\_forearm\_x 1 3.3666e-07 178

- max\_roll\_arm 1 3.3682e-07 178

- roll\_arm 1 3.3705e-07 178

- yaw\_forearm 1 3.3728e-07 178

- gyros\_belt\_z 1 3.3733e-07 178

- gyros\_arm\_y 1 3.3747e-07 178

- accel\_dumbbell\_z 1 3.3774e-07 178

- yaw\_dumbbell 1 3.3780e-07 178

- total\_accel\_forearm 1 3.3796e-07 178

- magnet\_arm\_x 1 3.3808e-07 178

- magnet\_arm\_z 1 3.3816e-07 178

- roll\_belt 1 3.3821e-07 178

- accel\_dumbbell\_y 1 3.3838e-07 178

- magnet\_dumbbell\_x 1 3.3887e-07 178

- gyros\_arm\_z 1 3.4007e-07 178

- accel\_belt\_y 1 3.4051e-07 178

- total\_accel\_dumbbell 1 3.4066e-07 178

- cvtd\_timestamp 1 3.4112e-07 178

- user\_name 1 3.4131e-07 178

- raw\_timestamp\_part\_2 1 3.4246e-07 178

- total\_accel\_belt 1 3.4254e-07 178

- magnet\_belt\_x 1 3.4307e-07 178

- pitch\_belt 1 3.4327e-07 178

- accel\_dumbbell\_x 1 3.4351e-07 178

- roll\_dumbbell 1 3.4356e-07 178

- accel\_forearm\_x 1 3.4372e-07 178

- accel\_forearm\_y 1 3.4440e-07 178

- gyros\_forearm\_y 1 3.4441e-07 178

- gyros\_belt\_y 1 3.4453e-07 178

- accel\_forearm\_z 1 3.4496e-07 178

- accel\_arm\_x 1 3.4523e-07 178

- pitch\_forearm 1 3.4539e-07 178

- pitch\_dumbbell 1 3.4548e-07 178

- raw\_timestamp\_part\_1 1 3.4674e-07 178

- magnet\_belt\_z 1 3.4705e-07 178

- gyros\_forearm\_z 1 3.5019e-07 178

- accel\_arm\_z 1 3.5284e-07 178

- magnet\_forearm\_x 1 3.5938e-07 178

- magnet\_forearm\_z 1 3.6755e-07 178

- magnet\_arm\_y 1 3.8429e-07 178

- accel\_arm\_y 1 3.8874e-07 178

- pitch\_arm 1 4.1489e-07 178

- num\_window 1 6.2245e-07 178

<none> 3.3487e-07 180

Step: AIC=178

classe ~ user\_name + raw\_timestamp\_part\_1 + raw\_timestamp\_part\_2 +

cvtd\_timestamp + new\_window + num\_window + roll\_belt + pitch\_belt +

total\_accel\_belt + kurtosis\_roll\_belt + skewness\_roll\_belt +

max\_roll\_belt + max\_yaw\_belt + min\_pitch\_belt + amplitude\_roll\_belt +

stddev\_pitch\_belt + var\_pitch\_belt + stddev\_yaw\_belt + var\_yaw\_belt +

gyros\_belt\_x + gyros\_belt\_y + gyros\_belt\_z + accel\_belt\_x +

accel\_belt\_y + accel\_belt\_z + magnet\_belt\_x + magnet\_belt\_y +

magnet\_belt\_z + roll\_arm + pitch\_arm + yaw\_arm + total\_accel\_arm +

var\_accel\_arm + avg\_roll\_arm + stddev\_roll\_arm + avg\_yaw\_arm +

stddev\_yaw\_arm + gyros\_arm\_x + gyros\_arm\_y + gyros\_arm\_z +

accel\_arm\_x + accel\_arm\_y + accel\_arm\_z + magnet\_arm\_x +

magnet\_arm\_y + magnet\_arm\_z + kurtosis\_roll\_arm + max\_roll\_arm +

max\_picth\_arm + max\_yaw\_arm + min\_roll\_arm + min\_yaw\_arm +

roll\_dumbbell + pitch\_dumbbell + yaw\_dumbbell + skewness\_pitch\_dumbbell +

max\_roll\_dumbbell + min\_pitch\_dumbbell + amplitude\_roll\_dumbbell +

total\_accel\_dumbbell + var\_roll\_dumbbell + gyros\_dumbbell\_x +

gyros\_dumbbell\_z + accel\_dumbbell\_x + accel\_dumbbell\_y +

accel\_dumbbell\_z + magnet\_dumbbell\_x + magnet\_dumbbell\_z +

pitch\_forearm + yaw\_forearm + skewness\_pitch\_forearm + min\_pitch\_forearm

+

amplitude\_roll\_forearm + total\_accel\_forearm + avg\_roll\_forearm +

stddev\_pitch\_forearm + var\_pitch\_forearm + stddev\_yaw\_forearm +

var\_yaw\_forearm + gyros\_forearm\_x + gyros\_forearm\_y + gyros\_forearm\_z +

accel\_forearm\_x + accel\_forearm\_y + accel\_forearm\_z + magnet\_forearm\_x +

magnet\_forearm\_y + magnet\_forearm\_z

Df Deviance AIC

- amplitude\_roll\_belt 1 3.3505e-07 176

- yaw\_arm 1 3.3505e-07 176

- stddev\_pitch\_belt 1 3.3508e-07 176

- stddev\_yaw\_belt 1 3.3511e-07 176

- var\_pitch\_forearm 1 3.3512e-07 176

- var\_roll\_dumbbell 1 3.3514e-07 176

- magnet\_dumbbell\_z 1 3.3516e-07 176

- var\_pitch\_belt 1 3.3518e-07 176

- max\_roll\_belt 1 3.3518e-07 176

- avg\_roll\_arm 1 3.3519e-07 176

- new\_window 1 3.3521e-07 176

- var\_yaw\_belt 1 3.3526e-07 176

- skewness\_pitch\_dumbbell 1 3.3527e-07 176

- avg\_yaw\_arm 1 3.3531e-07 176

- amplitude\_roll\_dumbbell 1 3.3532e-07 176

- stddev\_yaw\_arm 1 3.3532e-07 176

- skewness\_roll\_belt 1 3.3534e-07 176

- avg\_roll\_forearm 1 3.3535e-07 176

- stddev\_roll\_arm 1 3.3535e-07 176

- max\_picth\_arm 1 3.3535e-07 176

- gyros\_belt\_x 1 3.3536e-07 176

- min\_pitch\_belt 1 3.3540e-07 176

- skewness\_pitch\_forearm 1 3.3541e-07 176

- max\_yaw\_belt 1 3.3543e-07 176

- kurtosis\_roll\_belt 1 3.3544e-07 176

- min\_pitch\_dumbbell 1 3.3545e-07 176

- gyros\_dumbbell\_x 1 3.3558e-07 176

- max\_roll\_dumbbell 1 3.3560e-07 176

- max\_yaw\_arm 1 3.3565e-07 176

- amplitude\_roll\_forearm 1 3.3567e-07 176

- accel\_belt\_z 1 3.3568e-07 176

- stddev\_pitch\_forearm 1 3.3572e-07 176

- min\_pitch\_forearm 1 3.3572e-07 176

- var\_accel\_arm 1 3.3578e-07 176

- min\_yaw\_arm 1 3.3602e-07 176

- kurtosis\_roll\_arm 1 3.3608e-07 176

- var\_yaw\_forearm 1 3.3613e-07 176

- stddev\_yaw\_forearm 1 3.3618e-07 176

- gyros\_dumbbell\_z 1 3.3639e-07 176

- min\_roll\_arm 1 3.3641e-07 176

- total\_accel\_arm 1 3.3649e-07 176

- magnet\_belt\_y 1 3.3656e-07 176

- magnet\_forearm\_y 1 3.3662e-07 176

- gyros\_arm\_x 1 3.3672e-07 176

- gyros\_forearm\_x 1 3.3672e-07 176

- accel\_belt\_x 1 3.3681e-07 176

- roll\_arm 1 3.3706e-07 176

- max\_roll\_arm 1 3.3710e-07 176

- yaw\_forearm 1 3.3736e-07 176

- gyros\_belt\_z 1 3.3737e-07 176

- gyros\_arm\_y 1 3.3757e-07 176

- accel\_dumbbell\_z 1 3.3785e-07 176

- yaw\_dumbbell 1 3.3790e-07 176

- total\_accel\_forearm 1 3.3800e-07 176

- magnet\_arm\_x 1 3.3817e-07 176

- magnet\_arm\_z 1 3.3828e-07 176

- roll\_belt 1 3.3833e-07 176

- accel\_dumbbell\_y 1 3.3846e-07 176

- magnet\_dumbbell\_x 1 3.3896e-07 176

- gyros\_arm\_z 1 3.4012e-07 176

- accel\_belt\_y 1 3.4070e-07 176

- total\_accel\_dumbbell 1 3.4079e-07 176

- cvtd\_timestamp 1 3.4120e-07 176

- user\_name 1 3.4143e-07 176

- raw\_timestamp\_part\_2 1 3.4262e-07 176

- total\_accel\_belt 1 3.4267e-07 176

- magnet\_belt\_x 1 3.4300e-07 176

- pitch\_belt 1 3.4329e-07 176

- accel\_dumbbell\_x 1 3.4357e-07 176

- roll\_dumbbell 1 3.4366e-07 176

- accel\_forearm\_x 1 3.4393e-07 176

- accel\_forearm\_y 1 3.4446e-07 176

- gyros\_forearm\_y 1 3.4448e-07 176

- gyros\_belt\_y 1 3.4472e-07 176

- accel\_forearm\_z 1 3.4514e-07 176

- accel\_arm\_x 1 3.4527e-07 176

- pitch\_forearm 1 3.4546e-07 176

- pitch\_dumbbell 1 3.4558e-07 176

- raw\_timestamp\_part\_1 1 3.4687e-07 176

- magnet\_belt\_z 1 3.4717e-07 176

- gyros\_forearm\_z 1 3.5031e-07 176

- accel\_arm\_z 1 3.5297e-07 176

- magnet\_forearm\_x 1 3.5939e-07 176

- magnet\_forearm\_z 1 3.6761e-07 176

- magnet\_arm\_y 1 3.8449e-07 176

- accel\_arm\_y 1 3.8885e-07 176

- pitch\_arm 1 4.1511e-07 176

- num\_window 1 6.2233e-07 176

<none> 3.3497e-07 178

Step: AIC=176

classe ~ user\_name + raw\_timestamp\_part\_1 + raw\_timestamp\_part\_2 +

cvtd\_timestamp + new\_window + num\_window + roll\_belt + pitch\_belt +

total\_accel\_belt + kurtosis\_roll\_belt + skewness\_roll\_belt +

max\_roll\_belt + max\_yaw\_belt + min\_pitch\_belt + stddev\_pitch\_belt +

var\_pitch\_belt + stddev\_yaw\_belt + var\_yaw\_belt + gyros\_belt\_x +

gyros\_belt\_y + gyros\_belt\_z + accel\_belt\_x + accel\_belt\_y +

accel\_belt\_z + magnet\_belt\_x + magnet\_belt\_y + magnet\_belt\_z +

roll\_arm + pitch\_arm + yaw\_arm + total\_accel\_arm + var\_accel\_arm +

avg\_roll\_arm + stddev\_roll\_arm + avg\_yaw\_arm + stddev\_yaw\_arm +

gyros\_arm\_x + gyros\_arm\_y + gyros\_arm\_z + accel\_arm\_x + accel\_arm\_y +

accel\_arm\_z + magnet\_arm\_x + magnet\_arm\_y + magnet\_arm\_z +

kurtosis\_roll\_arm + max\_roll\_arm + max\_picth\_arm + max\_yaw\_arm +

min\_roll\_arm + min\_yaw\_arm + roll\_dumbbell + pitch\_dumbbell +

yaw\_dumbbell + skewness\_pitch\_dumbbell + max\_roll\_dumbbell +

min\_pitch\_dumbbell + amplitude\_roll\_dumbbell + total\_accel\_dumbbell +

var\_roll\_dumbbell + gyros\_dumbbell\_x + gyros\_dumbbell\_z +

accel\_dumbbell\_x + accel\_dumbbell\_y + accel\_dumbbell\_z +

magnet\_dumbbell\_x + magnet\_dumbbell\_z + pitch\_forearm + yaw\_forearm +

skewness\_pitch\_forearm + min\_pitch\_forearm + amplitude\_roll\_forearm +

total\_accel\_forearm + avg\_roll\_forearm + stddev\_pitch\_forearm +

var\_pitch\_forearm + stddev\_yaw\_forearm + var\_yaw\_forearm +

gyros\_forearm\_x + gyros\_forearm\_y + gyros\_forearm\_z + accel\_forearm\_x +

accel\_forearm\_y + accel\_forearm\_z + magnet\_forearm\_x + magnet\_forearm\_y +

magnet\_forearm\_z

Df Deviance AIC

- stddev\_pitch\_belt 1 3.3510e-07 174

- yaw\_arm 1 3.3516e-07 174

- var\_pitch\_belt 1 3.3519e-07 174

- max\_roll\_belt 1 3.3520e-07 174

- new\_window 1 3.3522e-07 174

- avg\_roll\_arm 1 3.3522e-07 174

- var\_roll\_dumbbell 1 3.3525e-07 174

- magnet\_dumbbell\_z 1 3.3526e-07 174

- var\_pitch\_forearm 1 3.3526e-07 174

- stddev\_yaw\_belt 1 3.3531e-07 174

- min\_pitch\_dumbbell 1 3.3531e-07 174

- stddev\_roll\_arm 1 3.3533e-07 174

- var\_yaw\_belt 1 3.3534e-07 174

- stddev\_yaw\_arm 1 3.3536e-07 174

- avg\_yaw\_arm 1 3.3539e-07 174

- avg\_roll\_forearm 1 3.3539e-07 174

- skewness\_pitch\_dumbbell 1 3.3539e-07 174

- max\_picth\_arm 1 3.3541e-07 174

- skewness\_roll\_belt 1 3.3543e-07 174

- amplitude\_roll\_dumbbell 1 3.3543e-07 174

- min\_pitch\_belt 1 3.3543e-07 174

- skewness\_pitch\_forearm 1 3.3545e-07 174

- max\_yaw\_belt 1 3.3546e-07 174

- kurtosis\_roll\_belt 1 3.3547e-07 174

- gyros\_belt\_x 1 3.3548e-07 174

- max\_roll\_dumbbell 1 3.3560e-07 174

- gyros\_dumbbell\_x 1 3.3564e-07 174

- amplitude\_roll\_forearm 1 3.3567e-07 174

- max\_yaw\_arm 1 3.3568e-07 174

- stddev\_pitch\_forearm 1 3.3571e-07 174

- min\_pitch\_forearm 1 3.3576e-07 174

- var\_accel\_arm 1 3.3581e-07 174

- accel\_belt\_z 1 3.3586e-07 174

- min\_yaw\_arm 1 3.3608e-07 174

- var\_yaw\_forearm 1 3.3614e-07 174

- stddev\_yaw\_forearm 1 3.3620e-07 174

- kurtosis\_roll\_arm 1 3.3633e-07 174

- gyros\_dumbbell\_z 1 3.3641e-07 174

- total\_accel\_arm 1 3.3656e-07 174

- magnet\_belt\_y 1 3.3663e-07 174

- min\_roll\_arm 1 3.3664e-07 174

- gyros\_arm\_x 1 3.3667e-07 174

- magnet\_forearm\_y 1 3.3672e-07 174

- gyros\_forearm\_x 1 3.3680e-07 174

- accel\_belt\_x 1 3.3684e-07 174

- roll\_arm 1 3.3708e-07 174

- max\_roll\_arm 1 3.3715e-07 174

- gyros\_belt\_z 1 3.3744e-07 174

- yaw\_forearm 1 3.3747e-07 174

- gyros\_arm\_y 1 3.3755e-07 174

- accel\_dumbbell\_z 1 3.3789e-07 174

- yaw\_dumbbell 1 3.3801e-07 174

- total\_accel\_forearm 1 3.3808e-07 174

- magnet\_arm\_x 1 3.3819e-07 174

- magnet\_arm\_z 1 3.3832e-07 174

- roll\_belt 1 3.3840e-07 174

- accel\_dumbbell\_y 1 3.3856e-07 174

- magnet\_dumbbell\_x 1 3.3901e-07 174

- gyros\_arm\_z 1 3.4039e-07 174

- accel\_belt\_y 1 3.4073e-07 174

- total\_accel\_dumbbell 1 3.4082e-07 174

- cvtd\_timestamp 1 3.4126e-07 174

- user\_name 1 3.4147e-07 174

- raw\_timestamp\_part\_2 1 3.4264e-07 174

- total\_accel\_belt 1 3.4277e-07 174

- magnet\_belt\_x 1 3.4292e-07 174

- pitch\_belt 1 3.4337e-07 174

- accel\_dumbbell\_x 1 3.4360e-07 174

- roll\_dumbbell 1 3.4374e-07 174

- accel\_forearm\_x 1 3.4392e-07 174

- accel\_forearm\_y 1 3.4449e-07 174

- gyros\_forearm\_y 1 3.4450e-07 174

- gyros\_belt\_y 1 3.4475e-07 174

- accel\_forearm\_z 1 3.4522e-07 174

- accel\_arm\_x 1 3.4535e-07 174

- pitch\_forearm 1 3.4549e-07 174

- pitch\_dumbbell 1 3.4562e-07 174

- raw\_timestamp\_part\_1 1 3.4686e-07 174

- magnet\_belt\_z 1 3.4719e-07 174

- gyros\_forearm\_z 1 3.5032e-07 174

- accel\_arm\_z 1 3.5308e-07 174

- magnet\_forearm\_x 1 3.5947e-07 174

- magnet\_forearm\_z 1 3.6758e-07 174

- magnet\_arm\_y 1 3.8456e-07 174

- accel\_arm\_y 1 3.8896e-07 174

- pitch\_arm 1 4.1522e-07 174

- num\_window 1 6.2250e-07 174

<none> 3.3505e-07 176

Step: AIC=174

classe ~ user\_name + raw\_timestamp\_part\_1 + raw\_timestamp\_part\_2 +

cvtd\_timestamp + new\_window + num\_window + roll\_belt + pitch\_belt +

total\_accel\_belt + kurtosis\_roll\_belt + skewness\_roll\_belt +

max\_roll\_belt + max\_yaw\_belt + min\_pitch\_belt + var\_pitch\_belt +

stddev\_yaw\_belt + var\_yaw\_belt + gyros\_belt\_x + gyros\_belt\_y +

gyros\_belt\_z + accel\_belt\_x + accel\_belt\_y + accel\_belt\_z +

magnet\_belt\_x + magnet\_belt\_y + magnet\_belt\_z + roll\_arm +

pitch\_arm + yaw\_arm + total\_accel\_arm + var\_accel\_arm + avg\_roll\_arm +

stddev\_roll\_arm + avg\_yaw\_arm + stddev\_yaw\_arm + gyros\_arm\_x +

gyros\_arm\_y + gyros\_arm\_z + accel\_arm\_x + accel\_arm\_y + accel\_arm\_z +

magnet\_arm\_x + magnet\_arm\_y + magnet\_arm\_z + kurtosis\_roll\_arm +

max\_roll\_arm + max\_picth\_arm + max\_yaw\_arm + min\_roll\_arm +

min\_yaw\_arm + roll\_dumbbell + pitch\_dumbbell + yaw\_dumbbell +

skewness\_pitch\_dumbbell + max\_roll\_dumbbell + min\_pitch\_dumbbell +

amplitude\_roll\_dumbbell + total\_accel\_dumbbell + var\_roll\_dumbbell +

gyros\_dumbbell\_x + gyros\_dumbbell\_z + accel\_dumbbell\_x +

accel\_dumbbell\_y + accel\_dumbbell\_z + magnet\_dumbbell\_x +

magnet\_dumbbell\_z + pitch\_forearm + yaw\_forearm + skewness\_pitch\_forearm

+

min\_pitch\_forearm + amplitude\_roll\_forearm + total\_accel\_forearm +

avg\_roll\_forearm + stddev\_pitch\_forearm + var\_pitch\_forearm +

stddev\_yaw\_forearm + var\_yaw\_forearm + gyros\_forearm\_x +

gyros\_forearm\_y + gyros\_forearm\_z + accel\_forearm\_x + accel\_forearm\_y +

accel\_forearm\_z + magnet\_forearm\_x + magnet\_forearm\_y + magnet\_forearm\_z

Df Deviance AIC

- yaw\_arm 1 3.3518e-07 172

- max\_roll\_belt 1 3.3520e-07 172

- var\_pitch\_belt 1 3.3521e-07 172

- new\_window 1 3.3523e-07 172

- magnet\_dumbbell\_z 1 3.3530e-07 172

- stddev\_yaw\_belt 1 3.3531e-07 172

- var\_yaw\_belt 1 3.3534e-07 172

- var\_pitch\_forearm 1 3.3538e-07 172

- avg\_roll\_arm 1 3.3538e-07 172

- min\_pitch\_dumbbell 1 3.3538e-07 172

- stddev\_yaw\_arm 1 3.3539e-07 172

- avg\_roll\_forearm 1 3.3540e-07 172

- avg\_yaw\_arm 1 3.3541e-07 172

- skewness\_pitch\_dumbbell 1 3.3544e-07 172

- min\_pitch\_belt 1 3.3545e-07 172

- stddev\_roll\_arm 1 3.3546e-07 172

- skewness\_roll\_belt 1 3.3546e-07 172

- var\_roll\_dumbbell 1 3.3547e-07 172

- gyros\_belt\_x 1 3.3549e-07 172

- max\_picth\_arm 1 3.3550e-07 172

- amplitude\_roll\_dumbbell 1 3.3551e-07 172

- max\_yaw\_belt 1 3.3558e-07 172

- kurtosis\_roll\_belt 1 3.3558e-07 172

- amplitude\_roll\_forearm 1 3.3567e-07 172

- gyros\_dumbbell\_x 1 3.3572e-07 172

- skewness\_pitch\_forearm 1 3.3579e-07 172

- min\_pitch\_forearm 1 3.3581e-07 172

- stddev\_pitch\_forearm 1 3.3582e-07 172

- accel\_belt\_z 1 3.3582e-07 172

- var\_accel\_arm 1 3.3585e-07 172

- max\_roll\_dumbbell 1 3.3585e-07 172

- max\_yaw\_arm 1 3.3597e-07 172

- var\_yaw\_forearm 1 3.3619e-07 172

- stddev\_yaw\_forearm 1 3.3624e-07 172

- min\_yaw\_arm 1 3.3632e-07 172

- kurtosis\_roll\_arm 1 3.3633e-07 172

- gyros\_dumbbell\_z 1 3.3652e-07 172

- total\_accel\_arm 1 3.3663e-07 172

- magnet\_belt\_y 1 3.3670e-07 172

- magnet\_forearm\_y 1 3.3679e-07 172

- gyros\_forearm\_x 1 3.3688e-07 172

- gyros\_arm\_x 1 3.3688e-07 172

- accel\_belt\_x 1 3.3695e-07 172

- min\_roll\_arm 1 3.3697e-07 172

- roll\_arm 1 3.3718e-07 172

- max\_roll\_arm 1 3.3727e-07 172

- yaw\_forearm 1 3.3753e-07 172

- gyros\_belt\_z 1 3.3753e-07 172

- gyros\_arm\_y 1 3.3770e-07 172

- accel\_dumbbell\_z 1 3.3797e-07 172

- yaw\_dumbbell 1 3.3808e-07 172

- total\_accel\_forearm 1 3.3812e-07 172

- magnet\_arm\_x 1 3.3832e-07 172

- magnet\_arm\_z 1 3.3838e-07 172

- roll\_belt 1 3.3847e-07 172

- accel\_dumbbell\_y 1 3.3860e-07 172

- magnet\_dumbbell\_x 1 3.3915e-07 172

- gyros\_arm\_z 1 3.4044e-07 172

- accel\_belt\_y 1 3.4082e-07 172

- total\_accel\_dumbbell 1 3.4104e-07 172

- cvtd\_timestamp 1 3.4128e-07 172

- user\_name 1 3.4155e-07 172

- raw\_timestamp\_part\_2 1 3.4272e-07 172

- total\_accel\_belt 1 3.4279e-07 172

- magnet\_belt\_x 1 3.4317e-07 172

- pitch\_belt 1 3.4344e-07 172

- accel\_dumbbell\_x 1 3.4378e-07 172

- roll\_dumbbell 1 3.4382e-07 172

- accel\_forearm\_x 1 3.4412e-07 172

- accel\_forearm\_y 1 3.4461e-07 172

- gyros\_forearm\_y 1 3.4463e-07 172

- gyros\_belt\_y 1 3.4484e-07 172

- accel\_forearm\_z 1 3.4527e-07 172

- accel\_arm\_x 1 3.4539e-07 172

- pitch\_forearm 1 3.4552e-07 172

- pitch\_dumbbell 1 3.4575e-07 172

- raw\_timestamp\_part\_1 1 3.4691e-07 172

- magnet\_belt\_z 1 3.4722e-07 172

- gyros\_forearm\_z 1 3.5052e-07 172

- accel\_arm\_z 1 3.5315e-07 172

- magnet\_forearm\_x 1 3.5954e-07 172

- magnet\_forearm\_z 1 3.6764e-07 172

- magnet\_arm\_y 1 3.8455e-07 172

- accel\_arm\_y 1 3.8924e-07 172

- pitch\_arm 1 4.1550e-07 172

- num\_window 1 6.2266e-07 172

<none> 3.3510e-07 174

Step: AIC=172

classe ~ user\_name + raw\_timestamp\_part\_1 + raw\_timestamp\_part\_2 +

cvtd\_timestamp + new\_window + num\_window + roll\_belt + pitch\_belt +

total\_accel\_belt + kurtosis\_roll\_belt + skewness\_roll\_belt +

max\_roll\_belt + max\_yaw\_belt + min\_pitch\_belt + var\_pitch\_belt +

stddev\_yaw\_belt + var\_yaw\_belt + gyros\_belt\_x + gyros\_belt\_y +

gyros\_belt\_z + accel\_belt\_x + accel\_belt\_y + accel\_belt\_z +

magnet\_belt\_x + magnet\_belt\_y + magnet\_belt\_z + roll\_arm +

pitch\_arm + total\_accel\_arm + var\_accel\_arm + avg\_roll\_arm +

stddev\_roll\_arm + avg\_yaw\_arm + stddev\_yaw\_arm + gyros\_arm\_x +

gyros\_arm\_y + gyros\_arm\_z + accel\_arm\_x + accel\_arm\_y + accel\_arm\_z +

magnet\_arm\_x + magnet\_arm\_y + magnet\_arm\_z + kurtosis\_roll\_arm +

max\_roll\_arm + max\_picth\_arm + max\_yaw\_arm + min\_roll\_arm +

min\_yaw\_arm + roll\_dumbbell + pitch\_dumbbell + yaw\_dumbbell +

skewness\_pitch\_dumbbell + max\_roll\_dumbbell + min\_pitch\_dumbbell +

amplitude\_roll\_dumbbell + total\_accel\_dumbbell + var\_roll\_dumbbell +

gyros\_dumbbell\_x + gyros\_dumbbell\_z + accel\_dumbbell\_x +

accel\_dumbbell\_y + accel\_dumbbell\_z + magnet\_dumbbell\_x +

magnet\_dumbbell\_z + pitch\_forearm + yaw\_forearm + skewness\_pitch\_forearm

+

min\_pitch\_forearm + amplitude\_roll\_forearm + total\_accel\_forearm +

avg\_roll\_forearm + stddev\_pitch\_forearm + var\_pitch\_forearm +

stddev\_yaw\_forearm + var\_yaw\_forearm + gyros\_forearm\_x +

gyros\_forearm\_y + gyros\_forearm\_z + accel\_forearm\_x + accel\_forearm\_y +

accel\_forearm\_z + magnet\_forearm\_x + magnet\_forearm\_y + magnet\_forearm\_z

Df Deviance AIC

- max\_roll\_belt 1 3.3500e-07 170

- var\_pitch\_belt 1 3.3500e-07 170

- magnet\_dumbbell\_z 1 3.3500e-07 170

- new\_window 1 3.3500e-07 170

- stddev\_yaw\_belt 1 3.3500e-07 170

- var\_yaw\_belt 1 3.3500e-07 170

- min\_pitch\_dumbbell 1 3.3500e-07 170

- var\_pitch\_forearm 1 3.3600e-07 170

- avg\_roll\_arm 1 3.3600e-07 170

- skewness\_roll\_belt 1 3.3600e-07 170

- skewness\_pitch\_dumbbell 1 3.3600e-07 170

- avg\_yaw\_arm 1 3.3600e-07 170

- stddev\_yaw\_arm 1 3.3600e-07 170

- avg\_roll\_forearm 1 3.3600e-07 170

- accel\_belt\_z 1 3.3600e-07 170

- var\_roll\_dumbbell 1 3.3600e-07 170

- gyros\_belt\_x 1 3.3600e-07 170

- stddev\_roll\_arm 1 3.3600e-07 170

- min\_pitch\_belt 1 3.3600e-07 170

- max\_yaw\_belt 1 3.3600e-07 170

- kurtosis\_roll\_belt 1 3.3600e-07 170

- amplitude\_roll\_dumbbell 1 3.3600e-07 170

- gyros\_dumbbell\_x 1 3.3600e-07 170

- amplitude\_roll\_forearm 1 3.3600e-07 170

- skewness\_pitch\_forearm 1 3.3600e-07 170

- min\_pitch\_forearm 1 3.3600e-07 170

- stddev\_pitch\_forearm 1 3.3600e-07 170

- max\_roll\_dumbbell 1 3.3600e-07 170

- var\_accel\_arm 1 3.3600e-07 170

- max\_yaw\_arm 1 3.3600e-07 170

- gyros\_dumbbell\_z 1 3.3600e-07 170

- var\_yaw\_forearm 1 3.3600e-07 170

- total\_accel\_arm 1 3.3600e-07 170

- min\_yaw\_arm 1 3.3600e-07 170

- kurtosis\_roll\_arm 1 3.3600e-07 170

- magnet\_forearm\_y 1 3.3700e-07 170

- magnet\_belt\_y 1 3.3700e-07 170

- gyros\_forearm\_x 1 3.3700e-07 170

- min\_roll\_arm 1 3.3700e-07 170

- gyros\_arm\_x 1 3.3700e-07 170

- yaw\_forearm 1 3.3700e-07 170

- max\_roll\_arm 1 3.3700e-07 170

- accel\_belt\_x 1 3.3800e-07 170

- roll\_arm 1 3.3800e-07 170

- magnet\_arm\_x 1 3.3800e-07 170

- total\_accel\_forearm 1 3.3800e-07 170

- gyros\_belt\_z 1 3.3800e-07 170

- magnet\_arm\_z 1 3.3800e-07 170

- gyros\_arm\_y 1 3.3900e-07 170

- accel\_dumbbell\_y 1 3.3900e-07 170

- roll\_belt 1 3.3900e-07 170

- accel\_dumbbell\_z 1 3.3900e-07 170

- yaw\_dumbbell 1 3.4000e-07 170

- gyros\_arm\_z 1 3.4000e-07 170

- cvtd\_timestamp 1 3.4100e-07 170

- user\_name 1 3.4100e-07 170

- accel\_belt\_y 1 3.4100e-07 170

- total\_accel\_belt 1 3.4200e-07 170

- magnet\_belt\_x 1 3.4300e-07 170

- roll\_dumbbell 1 3.4300e-07 170

- pitch\_belt 1 3.4300e-07 170

- magnet\_dumbbell\_x 1 3.4300e-07 170

- total\_accel\_dumbbell 1 3.4300e-07 170

- accel\_forearm\_x 1 3.4400e-07 170

- accel\_forearm\_z 1 3.4400e-07 170

- gyros\_belt\_y 1 3.4400e-07 170

- raw\_timestamp\_part\_2 1 3.4500e-07 170

- accel\_arm\_x 1 3.4500e-07 170

- pitch\_forearm 1 3.4500e-07 170

- accel\_forearm\_y 1 3.4500e-07 170

- gyros\_forearm\_y 1 3.4500e-07 170

- raw\_timestamp\_part\_1 1 3.4600e-07 170

- accel\_dumbbell\_x 1 3.4700e-07 170

- pitch\_dumbbell 1 3.4700e-07 170

- magnet\_belt\_z 1 3.4800e-07 170

- gyros\_forearm\_z 1 3.5000e-07 170

- stddev\_yaw\_forearm 1 3.5300e-07 170

- accel\_arm\_z 1 3.5400e-07 170

- magnet\_forearm\_x 1 3.5800e-07 170

- magnet\_forearm\_z 1 3.6700e-07 170

- magnet\_arm\_y 1 3.8500e-07 170

- accel\_arm\_y 1 3.9200e-07 170

- pitch\_arm 1 4.1600e-07 170

- num\_window 1 1.3160e-06 170

- max\_picth\_arm 1 4.5612e-05 170

<none> 3.3500e-07 172

Step: AIC=170

classe ~ user\_name + raw\_timestamp\_part\_1 + raw\_timestamp\_part\_2 +

cvtd\_timestamp + new\_window + num\_window + roll\_belt + pitch\_belt +

total\_accel\_belt + kurtosis\_roll\_belt + skewness\_roll\_belt +

max\_yaw\_belt + min\_pitch\_belt + var\_pitch\_belt + stddev\_yaw\_belt +

var\_yaw\_belt + gyros\_belt\_x + gyros\_belt\_y + gyros\_belt\_z +

accel\_belt\_x + accel\_belt\_y + accel\_belt\_z + magnet\_belt\_x +

magnet\_belt\_y + magnet\_belt\_z + roll\_arm + pitch\_arm + total\_accel\_arm +

var\_accel\_arm + avg\_roll\_arm + stddev\_roll\_arm + avg\_yaw\_arm +

stddev\_yaw\_arm + gyros\_arm\_x + gyros\_arm\_y + gyros\_arm\_z +

accel\_arm\_x + accel\_arm\_y + accel\_arm\_z + magnet\_arm\_x +

magnet\_arm\_y + magnet\_arm\_z + kurtosis\_roll\_arm + max\_roll\_arm +

max\_picth\_arm + max\_yaw\_arm + min\_roll\_arm + min\_yaw\_arm +

roll\_dumbbell + pitch\_dumbbell + yaw\_dumbbell + skewness\_pitch\_dumbbell +

max\_roll\_dumbbell + min\_pitch\_dumbbell + amplitude\_roll\_dumbbell +

total\_accel\_dumbbell + var\_roll\_dumbbell + gyros\_dumbbell\_x +

gyros\_dumbbell\_z + accel\_dumbbell\_x + accel\_dumbbell\_y +

accel\_dumbbell\_z + magnet\_dumbbell\_x + magnet\_dumbbell\_z +

pitch\_forearm + yaw\_forearm + skewness\_pitch\_forearm + min\_pitch\_forearm

+

amplitude\_roll\_forearm + total\_accel\_forearm + avg\_roll\_forearm +

stddev\_pitch\_forearm + var\_pitch\_forearm + stddev\_yaw\_forearm +

var\_yaw\_forearm + gyros\_forearm\_x + gyros\_forearm\_y + gyros\_forearm\_z +

accel\_forearm\_x + accel\_forearm\_y + accel\_forearm\_z + magnet\_forearm\_x +

magnet\_forearm\_y + magnet\_forearm\_z

Df Deviance AIC

- new\_window 1 3.3540e-07 168

- stddev\_yaw\_belt 1 3.3545e-07 168

- var\_yaw\_belt 1 3.3547e-07 168

- magnet\_dumbbell\_z 1 3.3552e-07 168

- avg\_roll\_arm 1 3.3553e-07 168

- var\_pitch\_forearm 1 3.3557e-07 168

- var\_pitch\_belt 1 3.3558e-07 168

- avg\_roll\_forearm 1 3.3559e-07 168

- avg\_yaw\_arm 1 3.3559e-07 168

- stddev\_yaw\_arm 1 3.3562e-07 168

- skewness\_roll\_belt 1 3.3562e-07 168

- var\_roll\_dumbbell 1 3.3562e-07 168

- stddev\_roll\_arm 1 3.3562e-07 168

- max\_picth\_arm 1 3.3564e-07 168

- accel\_belt\_z 1 3.3565e-07 168

- skewness\_pitch\_dumbbell 1 3.3566e-07 168

- amplitude\_roll\_dumbbell 1 3.3567e-07 168

- max\_yaw\_belt 1 3.3569e-07 168

- min\_pitch\_belt 1 3.3569e-07 168

- kurtosis\_roll\_belt 1 3.3570e-07 168

- gyros\_belt\_x 1 3.3573e-07 168

- min\_pitch\_dumbbell 1 3.3577e-07 168

- amplitude\_roll\_forearm 1 3.3586e-07 168

- skewness\_pitch\_forearm 1 3.3589e-07 168

- max\_roll\_dumbbell

1 3.3593e

-07 168

- min\_pitch\_forearm

1 3.3594e

-07 168

- stddev\_pitch\_forearm

1 3.3596e

-07 168

- gyros\_dumbbell\_x

1 3.3597e

-07 168

- var\_accel\_arm

1 3.3602e

-07 168

- gyros\_dumbbell\_z

1 3.3622e

-07 168

- max\_yaw\_arm

1 3.3623e

-07 168

- var\_yaw\_forearm

1 3.3632e

-07 168

- stddev\_yaw\_forearm

1 3.3640e

-07 168

- total\_accel\_arm

1 3.3641e

-07 168

- kurtosis\_roll\_arm

1 3.3644e

-07 168

- min\_yaw\_arm

1 3.3663e

-07 168

- magnet\_forearm\_y

1 3.3682e

-07 168

- magnet\_belt\_y

1 3.3701e

-07 168

- gyros\_forearm\_x

1 3.3704e

-07 168

- min\_roll\_arm

1 3.3704e

-07 168

- gyros\_arm\_x

1 3.3715e

-07 168

- yaw\_forearm

1 3.3723e

-07 168

- max\_roll\_arm

1 3.3735e

-07 168

- accel\_belt\_x

1 3.3764e

-07 168

- magnet\_arm\_x

1 3.3806e

-07 168

- roll\_arm

1 3.3811e

-07 168

- gyros\_belt\_z

1 3.3826e

-07 168

- total\_accel\_forearm

1 3.3827e

-07 168

- magnet\_arm\_z

1 3.3851e

-07 168

- gyros\_arm\_y

1 3.3861e

-07 168

-

accel\_dumbbell\_y

1 3.3872e

-07 168

- accel\_dumbbell\_z

1 3.3878e

-07 168

- roll\_belt

1 3.3892e

-07 168

- yaw\_dumbbell

1 3.3982e

-07 168

- gyros\_arm\_z

1 3.4009e

-07 168

- cvtd\_timestamp

1 3.4076e

-07 168

- user\_name

1 3.4084e

-07 168

- accel\_belt\_y

1 3.4102e

-07 168

- total\_accel\_belt

1 3.4204e

-07 168

- magnet\_belt\_x

1 3.4266e

-07 168

- roll\_dumbbell

1 3.4285e

-07 168

- pitch\_belt

1 3.4295e

-07 168

- magnet\_dumbbell\_x

1 3.4345e

-07 168

- total\_accel\_dumbbell

1 3.4352e

-07 168

- accel\_forearm\_x

1 3.4364e

-07 168

- accel\_forearm\_z

1 3.4414e

-07 168

- gyros\_belt\_y

1 3.4444e

-07 168

- raw\_timestamp\_part\_2

1 3.4469e

-07 168

- accel\_arm\_x

1 3.4473e

-07 168

- pitch\_forearm

1 3.4488e

-07 168

- gyros\_forearm\_y

1 3.4502e

-07 168

- accel\_forearm\_y

1 3.4507e

-07 168

- raw\_timestamp\_part\_1

1 3.4607e

-07 168

- accel\_dumbbell\_x

1 3.4676e

-07 168

- pitch\_dumbbell

1 3.4684e

-07 168

- magnet\_belt\_z

1 3.4812e

-07 168

- gyros\_forearm\_z

1 3.5031e

-07 168

- accel\_arm\_z

1 3.5449e

-07 168

- magnet\_forearm\_x

1 3.5752e

-07 168

-

magnet\_forearm\_z

1 3.6662e

-07 168

- magnet\_arm\_y

1 3.8446e

-07 168

- accel\_arm\_y 1 3.9190e-07 168

- pitch\_arm 1 4.1616e-07 168

- num\_window 1 1.1121e-06 168

<none> 3.3534e-07 170

Step: AIC=168

classe ~ user\_name + raw\_timestamp\_part\_1 + raw\_timestamp\_part\_2 +

cvtd\_timestamp + num\_window + roll\_belt + pitch\_belt + total\_accel\_belt +

kurtosis\_roll\_belt + skewness\_roll\_belt + max\_yaw\_belt +

min\_pitch\_belt + var\_pitch\_belt + stddev\_yaw\_belt + var\_yaw\_belt +

gyros\_belt\_x + gyros\_belt\_y + gyros\_belt\_z + accel\_belt\_x +

accel\_belt\_y + accel\_belt\_z + magnet\_belt\_x + magnet\_belt\_y +

magnet\_belt\_z + roll\_arm + pitch\_arm + total\_accel\_arm +

var\_accel\_arm + avg\_roll\_arm + stddev\_roll\_arm + avg\_yaw\_arm +

stddev\_yaw\_arm + gyros\_arm\_x + gyros\_arm\_y + gyros\_arm\_z +

accel\_arm\_x + accel\_arm\_y + accel\_arm\_z + magnet\_arm\_x +

magnet\_arm\_y + magnet\_arm\_z + kurtosis\_roll\_arm + max\_roll\_arm +

max\_picth\_arm + max\_yaw\_arm + min\_roll\_arm + min\_yaw\_arm +

roll\_dumbbell + pitch\_dumbbell + yaw\_dumbbell + skewness\_pitch\_dumbbell +

max\_roll\_dumbbell + min\_pitch\_dumbbell + amplitude\_roll\_dumbbell +

total\_accel\_dumbbell + var\_roll\_dumbbell + gyros\_dumbbell\_x +

gyros\_dumbbell\_z + accel\_dumbbell\_x + accel\_dumbbell\_y +

accel\_dumbbell\_z + magnet\_dumbbell\_x + magnet\_dumbbell\_z +

pitch\_forearm + yaw\_forearm + skewness\_pitch\_forearm + min\_pitch\_forearm

+

amplitude\_roll\_forearm + total\_accel\_forearm + avg\_roll\_forearm +

stddev\_pitch\_forearm + var\_pitch\_forearm + stddev\_yaw\_forearm +

var\_yaw\_forearm + gyros\_forearm\_x + gyros\_forearm\_y + gyros\_forearm\_z +

accel\_forearm\_x + accel\_forearm\_y + accel\_forearm\_z + magnet\_forearm\_x +

magnet\_forearm\_y + magnet\_forearm\_z

Df Deviance AIC

- stddev\_yaw\_belt 1 0.00 166.00

- var\_yaw\_belt 1 0.00 166.00

- avg\_roll\_arm 1 0.00 166.00

- var\_pitch\_forearm 1 0.00 166.00

- skewness\_roll\_belt 1 0.00 166.00

- var\_pitch\_belt 1 0.00 166.00

- magnet\_dumbbell\_z 1 0.00 166.00

- var\_roll\_dumbbell 1 0.00 166.00

- stddev\_roll\_arm 1 0.00 166.00

- avg\_roll\_forearm 1 0.00 166.00

- skewness\_pitch\_dumbbell 1 0.00 166.00

- max\_yaw\_belt 1 0.00 166.00

- amplitude\_roll\_dumbbell 1 0.00 166.00

- kurtosis\_roll\_belt 1 0.00 166.00

- avg\_yaw\_arm 1 0.00 166.00

- accel\_belt\_z 1 0.00 166.00

- stddev\_yaw\_arm 1 0.00 166.00

- min\_pitch\_belt 1 0.00 166.00

- gyros\_belt\_x 1 0.00 166.00

- max\_picth\_arm 1 0.00 166.00

- skewness\_pitch\_forearm 1 0.00 166.00

- min\_pitch\_dumbbell 1 0.00 166.00

- amplitude\_roll\_forearm 1 0.00 166.00

- max\_roll\_dumbbell 1 0.00 166.00

- stddev\_pitch\_forearm 1 0.00 166.00

- min\_pitch\_forearm

1

0.00 166.00

- gyros\_dumbbell\_x

1 0.00 166.00

- var\_accel\_arm

1 0.00 166.00

- max\_yaw\_arm

1 0.00 166.00

- var\_yaw\_forearm

1 0.00 166.00

- gyros\_dumbbell\_z

1 0.00 166.00

- stddev\_yaw\_forearm

1 0.00 166.00

- total\_accel\_arm

1 0.00 166.00

- kurtosis\_roll\_arm

1 0.00 166.00

- min\_yaw\_arm

1 0.00 166.00

- magnet\_forearm\_y

1 0.00 166.00

- gyros\_forearm\_x

1 0.00 166.00

- min\_roll\_arm

1 0.00 166.00

- magnet\_belt\_y

1 0.00 166.00

- gyros\_arm\_x

1 0.00 166.00

- yaw\_forearm

1 0.00 166.00

- max\_roll\_arm

1 0.00 166.00

- accel\_belt\_x

1 0.00 166.00

- roll\_arm

1 0.00 166.00

- magnet\_arm\_x

1 0.00 166.00

- gyros\_belt\_z

1 0.00 166.00

- total\_accel\_forearm

1 0.00 166.00

- magnet\_arm\_z

1 0.00 166.00

- gyros\_arm\_y

1 0.00 166.00

- accel\_dumbbell\_y

1 0.00 166.00

- accel\_dumbbell\_z

1 0.00 166.00

- roll\_belt

1 0.00 166.00

- yaw\_dumbbell

1 0.00 166.00

- gyros\_arm\_z

1 0.00 166.00

- cvtd\_timestamp

1 0.00 166.00

- user\_name

1 0.00 166.00

- accel\_belt\_y

1 0.00 166.00

- total\_accel\_belt

1 0.00 166.00

- magnet\_belt\_x

1 0.00 166.00

- roll\_dumbbell

1 0.00 166.00

- pitch\_belt

1 0.00 166.00

- magnet\_dumbbell\_x

1 0.00 166.00

- total\_accel\_dumbbell

1 0.00 166.00

- accel\_forearm\_x

1 0.00 166.00

- accel\_forearm\_z

1 0.00 166.00

- gyros\_belt\_y

1 0.00 166.00

- accel\_arm\_x

1 0.00 166.00

- raw\_timestamp\_part\_2

1 0.00 166.00

- pitch\_forearm

1 0.00 166.00

- gyros\_forearm\_y

1 0.00 166.00

- accel\_forearm\_y

1 0.00 166.00

- raw\_timestamp\_part\_1

1 0.00 166.00

- accel\_dumbbell\_x

1 0.00 166.00

- pitch\_dumbbell

1 0.00 166.00

- magnet\_belt\_z

1 0.00 166.00

- gyros\_forearm\_z

1 0.00 166.00

- accel\_arm\_z

1 0.0

0 166.00

- magnet\_forearm\_x

1 0.00 166.00

- magnet\_forearm\_z

1 0.00 166.00

- magnet\_arm\_y

1 0.00 166.00

- accel\_arm\_y

1 0.00 166.00

- pitch\_arm

1 0.00 166.00

<none> 0.00 168.00

- num\_window 1 648.79 814.79

Step: AIC=166

classe ~ user\_name + raw\_timestamp\_part\_1 + raw\_timestamp\_part\_2 +

cvtd\_timestamp + num\_window + roll\_belt + pitch\_belt + total\_accel\_belt +

kurtosis\_roll\_belt + skewness\_roll\_belt + max\_yaw\_belt +

min\_pitch\_belt + var\_pitch\_belt + var\_yaw\_belt + gyros\_belt\_x +

gyros\_belt\_y + gyros\_belt\_z + accel\_belt\_x + accel\_belt\_y +

accel\_belt\_z + magnet\_belt\_x + magnet\_belt\_y + magnet\_belt\_z +

roll\_arm + pitch\_arm + total\_accel\_arm + var\_accel\_arm +

avg\_roll\_arm + stddev\_roll\_arm + avg\_yaw\_arm + stddev\_yaw\_arm +

gyros\_arm\_x + gyros\_arm\_y + gyros\_arm\_z + accel\_arm\_x + accel\_arm\_y +

accel\_arm\_z + magnet\_arm\_x + magnet\_arm\_y + magnet\_arm\_z +

kurtosis\_roll\_arm + max\_roll\_arm + max\_picth\_arm + max\_yaw\_arm +

min\_roll\_arm + min\_yaw\_arm + roll\_dumbbell + pitch\_dumbbell +

yaw\_dumbbell + skewness\_pitch\_dumbbell + max\_roll\_dumbbell +

min\_pitch\_dumbbell + amplitude\_roll\_dumbbell + total\_accel\_dumbbell +

var\_roll\_dumbbell + gyros\_dumbbell\_x + gyros\_dumbbell\_z +

accel\_dumbbell\_x + accel\_dumbbell\_y + accel\_dumbbell\_z +

magnet\_dumbbell\_x + magnet\_dumbbell\_z + pitch\_forearm + yaw\_forearm +

skewness\_pitch\_forearm + min\_pitch\_forearm + amplitude\_roll\_forearm +

total\_accel\_forearm + avg\_roll\_forearm + stddev\_pitch\_forearm +

var\_pitch\_forearm + stddev\_yaw\_forearm + var\_yaw\_forearm +

gyros\_forearm\_x + gyros\_forearm\_y + gyros\_forearm\_z + accel\_forearm\_x +

accel\_forearm\_y + accel\_forearm\_z + magnet\_forearm\_x + magnet\_forearm\_y +

magnet\_forearm\_z

Df Deviance AIC

- magnet\_dumbbell\_z 1 3.3560e-07 164

- avg\_roll\_arm 1 3.3561e-07 164

- var\_pitch\_forearm 1 3.3561e-07 164

- skewness\_pitch\_dumbbell 1 3.3571e-07 164

- stddev\_roll\_arm 1 3.3572e-07 164

- avg\_roll\_forearm 1 3.3573e-07 164

- max\_yaw\_belt 1 3.3574e-07 164

- kurtosis\_roll\_belt 1 3.3574e-07 164

- skewness\_pitch\_forearm 1 3.3576e-07 164

- var\_yaw\_belt 1 3.3576e-07 164

- accel\_belt\_z 1 3.3576e-07 164

- skewness\_roll\_belt 1 3.3577e-07 164

- min\_pitch\_belt 1 3.3577e-07 164

- var\_roll\_dumbbell 1 3.3578e-07 164

- gyros\_belt\_x 1 3.3579e-07 164

- avg\_yaw\_arm 1 3.3580e-07 164

- amplitude\_roll\_forearm 1 3.3581e-07 164

- var\_pitch\_belt 1 3.3584e-07 164

- stddev\_yaw\_arm 1 3.3587e-07 164

- max\_picth\_arm 1 3.3590e-07 164

- amplitude\_roll\_dumbbell 1 3.3593e-07 164

- min\_pitch\_dumbbell 1 3.3598e-07 164

- gyros\_dumbbell\_x 1 3.3604e-07 164

- max\_roll\_dumbbell 1 3.3604e-07 164

- stddev\_pitch\_forearm 1 3.3604e-07 164

- var\_accel\_arm 1 3.3607e-07 164

- min\_pitch\_forearm 1 3.3611e-07 164

- max\_yaw\_arm 1 3.3631e-07 164

- var\_yaw\_forearm 1 3.3634e-07 164

- gyros\_dumbbell\_z 1 3.3640e-07 164

- stddev\_yaw\_forearm 1 3.3641e-07 164

- kurtosis\_roll\_arm 1 3.3645e-07 164

- total\_accel\_arm 1 3.3652e-07 164

- min\_yaw\_arm 1 3.3665e-07 164

- magnet\_forearm\_y 1 3.3684e-07 164

- gyros\_forearm\_x 1 3.3711e-07 164

- min\_roll\_arm 1 3.3712e-07 164

- magnet\_belt\_y 1 3.3718e-07 164

- gyros\_arm\_x 1 3.3727e-07 164

- yaw\_forearm 1 3.3734e-07 164

- max\_roll\_arm 1 3.3744e-07 164

- accel\_belt\_x 1 3.3780e-07 164

- roll\_arm 1 3.3816e-07 164

- magnet\_arm\_x 1 3.3826e-07 164

- total\_accel\_forearm 1 3.3836e-07 164

- gyros\_belt\_z 1 3.3837e-07 164

- magnet\_arm\_z 1 3.3863e-07 164

- gyros\_arm\_y 1 3.3869e-07 164

- accel\_dumbbell\_y 1 3.3887e-07 164

- accel\_dumbbell\_z 1 3.3894e-07 164

- roll\_belt 1 3.3902e-07 164

- yaw\_dumbbell 1 3.3994e-07 164

- gyros\_arm\_z 1 3.4003e-07 164

- cvtd\_timestamp 1 3.4097e-07 164

- accel\_belt\_y 1 3.4104e-07 164

- user\_name 1 3.4109e-07 164

- total\_accel\_belt 1 3.4194e-07 164

- magnet\_belt\_x 1 3.4284e-07 164

- roll\_dumbbell 1 3.4300e-07 164

- pitch\_belt 1 3.4326e-07 164

- total\_accel\_dumbbell 1 3.4350e-07 164

- magnet\_dumbbell\_x 1 3.4351e-07 164

- accel\_forearm\_x 1 3.4379e-07 164

- accel\_forearm\_z 1 3.4418e-07 164

- gyros\_belt\_y 1 3.4442e-07 164

- raw\_timestamp\_part\_2 1 3.4481e-07 164

- accel\_arm\_x 1 3.4487e-07 164

- pitch\_forearm 1 3.4491e-07 164

- gyros\_forearm\_y 1 3.4510e-07 164

- accel\_forearm\_y 1 3.4519e-07 164

- raw\_timestamp\_part\_1 1 3.4630e-07 164

- accel\_dumbbell\_x 1 3.4689e-07 164

- pitch\_dumbbell 1 3.4701e-07 164

- magnet\_belt\_z 1 3.4829e-07 164

- gyros\_forearm\_z 1 3.5035e-07 164

- accel\_arm\_z 1 3.5458e-07 164

- magnet\_forearm\_x 1 3.5767e-07 164

- magnet\_forearm\_z 1 3.6661e-07 164

- magnet\_arm\_y 1 3.8469e-07 164

- accel\_arm\_y 1 3.9211e-07 164

- pitch\_arm 1 4.1633e-07 164

- num\_window 1 1.5399e-06 164

<none> 3.3541e-07 166

Step: AIC=164

classe ~ user\_name + raw\_timestamp\_part\_1 + raw\_timestamp\_part\_2 +

cvtd\_timestamp + num\_window + roll\_belt + pitch\_belt + total\_accel\_belt +

kurtosis\_roll\_belt + skewness\_roll\_belt + max\_yaw\_belt +

min\_pitch\_belt + var\_pitch\_belt + var\_yaw\_belt + gyros\_belt\_x +

gyros\_belt\_y + gyros\_belt\_z + accel\_belt\_x + accel\_belt\_y +

accel\_belt\_z + magnet\_belt\_x + magnet\_belt\_y + magnet\_belt\_z +

roll\_arm + pitch\_arm + total\_accel\_arm + var\_accel\_arm +

avg\_roll\_arm + stddev\_roll\_arm + avg\_yaw\_arm + stddev\_yaw\_arm +

gyros\_arm\_x + gyros\_arm\_y + gyros\_arm\_z + accel\_arm\_x + accel\_arm\_y +

accel\_arm\_z + magnet\_arm\_x + magnet\_arm\_y + magnet\_arm\_z +

kurtosis\_roll\_arm + max\_roll\_arm + max\_picth\_arm + max\_yaw\_arm +

min\_roll\_arm + min\_yaw\_arm + roll\_dumbbell + pitch\_dumbbell +

yaw\_dumbbell + skewness\_pitch\_dumbbell + max\_roll\_dumbbell +

min\_pitch\_dumbbell + amplitude\_roll\_dumbbell + total\_accel\_dumbbell +

var\_roll\_dumbbell + gyros\_dumbbell\_x + gyros\_dumbbell\_z +

accel\_dumbbell\_x + accel\_dumbbell\_y + accel\_dumbbell\_z +

magnet\_dumbbell\_x + pitch\_forearm + yaw\_forearm + skewness\_pitch\_forearm

+

min\_pitch\_forearm + amplitude\_roll\_forearm + total\_accel\_forearm +

avg\_roll\_forearm + stddev\_pitch\_forearm + var\_pitch\_forearm +

stddev\_yaw\_forearm + var\_yaw\_forearm + gyros\_forearm\_x +

gyros\_forearm\_y + gyros\_forearm\_z + accel\_forearm\_x + accel\_forearm\_y +

accel\_forearm\_z + magnet\_forearm\_x + magnet\_forearm\_y + magnet\_forearm\_z

Df Deviance AIC

- var\_pitch\_forearm 1 3.3580e-07 162

- avg\_roll\_arm 1 3.3580e-07 162

- skewness\_pitch\_dumbbell 1 3.3589e-07 162

- avg\_roll\_forearm 1 3.3591e-07 162

- stddev\_roll\_arm 1 3.3592e-07 162

- max\_yaw\_belt 1 3.3592e-07 162

- skewness\_pitch\_forearm 1 3.3592e-07 162

- var\_yaw\_belt 1 3.3592e-07 162

- kurtosis\_roll\_belt 1 3.3592e-07 162

- skewness\_roll\_belt 1 3.3594e-07 162

- gyros\_belt\_x 1 3.3595e-07 162

- var\_roll\_dumbbell 1 3.3596e-07 162

- min\_pitch\_belt 1 3.3597e-07 162

- avg\_yaw\_arm 1 3.3597e-07 162

- accel\_belt\_z 1 3.3601e-07 162

- var\_pitch\_belt 1 3.3601e-07 162

- amplitude\_roll\_forearm 1 3.3601e-07 162

- stddev\_yaw\_arm 1 3.3603e-07 162

- max\_picth\_arm 1 3.3607e-07 162

- amplitude\_roll\_dumbbell 1 3.3612e-07 162

- gyros\_dumbbell\_x 1 3.3616e-07 162

- max\_roll\_dumbbell 1 3.3622e-07 162

- stddev\_pitch\_forearm 1 3.3622e-07 162

- var\_accel\_arm 1 3.3629e-07 162

- min\_pitch\_forearm 1 3.3632e-07 162

- max\_yaw\_arm 1 3.3645e-07 162

- var\_yaw\_forearm 1 3.3650e-07 162

- stddev\_yaw\_forearm 1 3.3656e-07 162

- kurtosis\_roll\_arm 1 3.3662e-07 162

- gyros\_dumbbell\_z 1 3.3667e-07 162

- total\_accel\_arm 1 3.3676e-07 162

- min\_yaw\_arm 1 3.3679e-07 162

- gyros\_forearm\_x 1 3.3723e-07 162

- min\_roll\_arm 1 3.3728e-07 162

- magnet\_forearm\_y 1 3.3734e-07 162

- magnet\_belt\_y 1 3.3740e-07 162

- max\_roll\_arm 1 3.3758e-07 162

- gyros\_arm\_x 1 3.3765e-07 162

- yaw\_forearm 1 3.3766e-07 162

- accel\_belt\_x 1 3.3804e-07 162

- min\_pitch\_dumbbell 1 3.3806e-07 162

- magnet\_arm\_x 1 3.3854e-07 162

- gyros\_belt\_z 1 3.3858e-07 162

- total\_accel\_forearm 1 3.3877e-07 162

- roll\_belt 1 3.3914e-07 162

- roll\_arm 1 3.3921e-07 162

- accel\_dumbbell\_y 1 3.3926e-07 162

- gyros\_arm\_y 1 3.3928e-07 162

- magnet\_arm\_z 1 3.3975e-07 162

- gyros\_arm\_z 1 3.4034e-07 162

- yaw\_dumbbell 1 3.4040e-07 162

- cvtd\_timestamp 1 3.4052e-07 162

- accel\_dumbbell\_z 1 3.4098e-07 162

- accel\_belt\_y 1 3.4160e-07 162

- user\_name 1 3.4177e-07 162

- total\_accel\_belt 1 3.4203e-07 162

- magnet\_belt\_x 1 3.4310e-07 162

- magnet\_dumbbell\_x 1 3.4342e-07 162

- pitch\_belt 1 3.4393e-07 162

- accel\_forearm\_x 1 3.4455e-07 162

- accel\_forearm\_z 1 3.4463e-07 162

- roll\_dumbbell 1 3.4474e-07 162

- gyros\_belt\_y 1 3.4474e-07 162

- accel\_forearm\_y 1 3.4525e-07 162

- raw\_timestamp\_part\_2 1 3.4535e-07 162

- accel\_arm\_x 1 3.4550e-07 162

- pitch\_forearm 1 3.4577e-07 162

- total\_accel\_dumbbell 1 3.4595e-07 162

- gyros\_forearm\_y 1 3.4598e-07 162

- accel\_dumbbell\_x 1 3.4749e-07 162

- raw\_timestamp\_part\_1 1 3.4801e-07 162

- pitch\_dumbbell 1 3.4830e-07 162

- magnet\_belt\_z 1 3.4888e-07 162

- gyros\_forearm\_z 1 3.5080e-07 162

- accel\_arm\_z 1 3.5651e-07 162

- magnet\_forearm\_x 1 3.5728e-07 162

- magnet\_forearm\_z 1 3.6609e-07 162

- magnet\_arm\_y 1 3.8505e-07 162

- accel\_arm\_y 1 3.9563e-07 162

- pitch\_arm 1 4.1713e-07 162

- num\_window 1 1.1337e-06 162

<none> 3.3560e-07 164

Step: AIC=162

classe ~ user\_name + raw\_timestamp\_part\_1 + raw\_timestamp\_part\_2 +

cvtd\_timestamp + num\_window + roll\_belt + pitch\_belt + total\_accel\_belt +

kurtosis\_roll\_belt + skewness\_roll\_belt + max\_yaw\_belt +

min\_pitch\_belt + var\_pitch\_belt + var\_yaw\_belt + gyros\_belt\_x +

gyros\_belt\_y + gyros\_belt\_z + accel\_belt\_x + accel\_belt\_y +

accel\_belt\_z + magnet\_belt\_x + magnet\_belt\_y + magnet\_belt\_z +

roll\_arm + pitch\_arm + total\_accel\_arm + var\_accel\_arm +

avg\_roll\_arm + stddev\_roll\_arm + avg\_yaw\_arm + stddev\_yaw\_arm +

gyros\_arm\_x + gyros\_arm\_y + gyros\_arm\_z + accel\_arm\_x + accel\_arm\_y +

accel\_arm\_z + magnet\_arm\_x + magnet\_arm\_y + magnet\_arm\_z +

kurtosis\_roll\_arm + max\_roll\_arm + max\_picth\_arm + max\_yaw\_arm +

min\_roll\_arm + min\_yaw\_arm + roll\_dumbbell + pitch\_dumbbell +

yaw\_dumbbell + skewness\_pitch\_dumbbell + max\_roll\_dumbbell +

min\_pitch\_dumbbell + amplitude\_roll\_dumbbell + total\_accel\_dumbbell +

var\_roll\_dumbbell + gyros\_dumbbell\_x + gyros\_dumbbell\_z +

accel\_dumbbell\_x + accel\_dumbbell\_y + accel\_dumbbell\_z +

magnet\_dumbbell\_x + pitch\_forearm + yaw\_forearm + skewness\_pitch\_forearm

+

min\_pitch\_forearm + amplitude\_roll\_forearm + total\_accel\_forearm +

avg\_roll\_forearm + stddev\_pitch\_forearm + stddev\_yaw\_forearm +

var\_yaw\_forearm + gyros\_forearm\_x + gyros\_forearm\_y + gyros\_forearm\_z +

accel\_forearm\_x + accel\_forearm\_y + accel\_forearm\_z + magnet\_forearm\_x +

magnet\_forearm\_y + magnet\_forearm\_z

Df Deviance AIC

- avg\_roll\_arm 1 3.3594e-07 160

- var\_yaw\_belt 1 3.3599e-07 160

- skewness\_roll\_belt 1 3.3600e-07 160

- var\_roll\_dumbbell 1 3.3601e-07 160

- min\_pitch\_belt 1 3.3601e-07 160

- skewness\_pitch\_dumbbell 1 3.3605e-07 160

- var\_pitch\_belt 1 3.3606e-07 160

- amplitude\_roll\_dumbbell 1 3.3611e-07 160

- avg\_roll\_forearm 1 3.3612e-07 160

- max\_yaw\_belt 1 3.3613e-07 160

- kurtosis\_roll\_belt 1 3.3614e-07 160

- gyros\_belt\_x 1 3.3615e-07 160

- amplitude\_roll\_forearm 1 3.3616e-07 160

- stddev\_roll\_arm 1 3.3619e-07 160

- max\_roll\_dumbbell 1 3.3619e-07 160

- stddev\_yaw\_arm 1 3.3622e-07 160

- stddev\_pitch\_forearm 1 3.3622e-07 160

- accel\_belt\_z 1 3.3623e-07 160

- var\_accel\_arm 1 3.3624e-07 160

- max\_picth\_arm 1 3.3630e-07 160

- skewness\_pitch\_forearm 1 3.3632e-07 160

- min\_pitch\_forearm 1 3.3632e-07 160

- gyros\_dumbbell\_x 1 3.3633e-07 160

- avg\_yaw\_arm 1 3.3635e-07 160

- min\_pitch\_dumbbell 1 3.3637e-07 160

- max\_yaw\_arm 1 3.3641e-07 160

- var\_yaw\_forearm 1 3.3654e-07 160

- stddev\_yaw\_forearm 1 3.3668e-07 160

- min\_yaw\_arm 1 3.3675e-07 160

- gyros\_dumbbell\_z 1 3.3682e-07 160

- kurtosis\_roll\_arm 1 3.3696e-07 160

- total\_accel\_arm 1 3.3699e-07 160

- min\_roll\_arm 1 3.3732e-07 160

- gyros\_forearm\_x 1 3.3752e-07 160

- magnet\_forearm\_y 1 3.3755e-07 160

- magnet\_belt\_y 1 3.3764e-07 160

- max\_roll\_arm 1 3.3778e-07 160

- gyros\_arm\_x 1 3.3786e-07 160

- yaw\_forearm 1 3.3800e-07 160

- accel\_belt\_x 1 3.3818e-07 160

- magnet\_arm\_x 1 3.3862e-07 160

- gyros\_belt\_z 1 3.3881e-07 160

- total\_accel\_forearm 1 3.3901e-07 160

- roll\_belt 1 3.3939e-07 160

- accel\_dumbbell\_y 1 3.3941e-07 160

- roll\_arm 1 3.3942e-07 160

- gyros\_arm\_y 1 3.3946e-07 160

- magnet\_arm\_z 1 3.4008e-07 160

- yaw\_dumbbell 1 3.4051e-07 160

- cvtd\_timestamp 1 3.4066e-07 160

- gyros\_arm\_z 1 3.4068e-07 160

- accel\_dumbbell\_z 1 3.4115e-07 160

- accel\_belt\_y 1 3.4183e-07 160

- user\_name 1 3.4192e-07 160

- total\_accel\_belt 1 3.4230e-07 160

- magnet\_belt\_x 1 3.4323e-07 160

- magnet\_dumbbell\_x 1 3.4373e-07 160

- pitch\_belt 1 3.4408e-07 160

- accel\_forearm\_z 1 3.4469e-07 160

- accel\_forearm\_x 1 3.4477e-07 160

- gyros\_belt\_y 1 3.4504e-07 160

- roll\_dumbbell 1 3.4507e-07 160

- accel\_arm\_x 1 3.4556e-07 160

- raw\_timestamp\_part\_2 1 3.4557e-07 160

- accel\_forearm\_y 1 3.4560e-07 160

- pitch\_forearm 1 3.4601e-07 160

- gyros\_forearm\_y 1 3.4616e-07 160

- total\_accel\_dumbbell 1 3.4624e-07 160

- accel\_dumbbell\_x 1 3.4783e-07 160

- raw\_timestamp\_part\_1 1 3.4807e-07 160

- pitch\_dumbbell 1 3.4867e-07 160

- magnet\_belt\_z 1 3.4903e-07 160

- gyros\_forearm\_z 1 3.5088e-07 160

- accel\_arm\_z 1 3.5689e-07 160

- magnet\_forearm\_x 1 3.5745e-07 160

- magnet\_forearm\_z 1 3.6649e-07 160

- magnet\_arm\_y 1 3.8562e-07 160

- accel\_arm\_y 1 3.9609e-07 160

- pitch\_arm 1 4.1734e-07 160

- num\_window 1 1.1586e-06 160

<none> 3.3580e-07 162

Step: AIC=160

classe ~ user\_name + raw\_timestamp\_part\_1 + raw\_timestamp\_part\_2 +

cvtd\_timestamp + num\_window + roll\_belt + pitch\_belt + total\_accel\_belt +

kurtosis\_roll\_belt + skewness\_roll\_belt + max\_yaw\_belt +

min\_pitch\_belt + var\_pitch\_belt + var\_yaw\_belt + gyros\_belt\_x +

gyros\_belt\_y + gyros\_belt\_z + accel\_belt\_x + accel\_belt\_y +

accel\_belt\_z + magnet\_belt\_x + magnet\_belt\_y + magnet\_belt\_z +

roll\_arm + pitch\_arm + total\_accel\_arm + var\_accel\_arm +

stddev\_roll\_arm + avg\_yaw\_arm + stddev\_yaw\_arm + gyros\_arm\_x +

gyros\_arm\_y + gyros\_arm\_z + accel\_arm\_x + accel\_arm\_y + accel\_arm\_z +

magnet\_arm\_x + magnet\_arm\_y + magnet\_arm\_z + kurtosis\_roll\_arm +

max\_roll\_arm + max\_picth\_arm + max\_yaw\_arm + min\_roll\_arm +

min\_yaw\_arm + roll\_dumbbell + pitch\_dumbbell + yaw\_dumbbell +

skewness\_pitch\_dumbbell + max\_roll\_dumbbell + min\_pitch\_dumbbell +

amplitude\_roll\_dumbbell + total\_accel\_dumbbell + var\_roll\_dumbbell +

gyros\_dumbbell\_x + gyros\_dumbbell\_z + accel\_dumbbell\_x +

accel\_dumbbell\_y + accel\_dumbbell\_z + magnet\_dumbbell\_x +

pitch\_forearm + yaw\_forearm + skewness\_pitch\_forearm + min\_pitch\_forearm

+

amplitude\_roll\_forearm + total\_accel\_forearm + avg\_roll\_forearm +

stddev\_pitch\_forearm + stddev\_yaw\_forearm + var\_yaw\_forearm +

gyros\_forearm\_x + gyros\_forearm\_y + gyros\_forearm\_z + accel\_forearm\_x +

accel\_forearm\_y + accel\_forearm\_z + magnet\_forearm\_x + magnet\_forearm\_y +

magnet\_forearm\_z

Df Deviance AIC

- var\_pitch\_belt 1 3.3615e-07 156

- skewness\_roll\_belt 1 3.3620e-07 156

- var\_roll\_dumbbell 1 3.3625e-07 156

- amplitude\_roll\_dumbbell 1 3.3635e-07 156

- min\_pitch\_belt 1 3.3635e-07 156

- gyros\_belt\_x 1 3.3637e-07 156

- stddev\_roll\_arm 1 3.3638e-07 156

- avg\_roll\_forearm 1 3.3639e-07 156

- max\_yaw\_belt 1 3.3640e-07 156

- kurtosis\_roll\_belt 1 3.3640e-07 156

- accel\_belt\_z 1 3.3643e-07 156

- stddev\_pitch\_forearm 1 3.3645e-07 156

- amplitude\_roll\_forearm 1 3.3645e-07 156

- max\_roll\_dumbbell 1 3.3648e-07 156

- skewness\_pitch\_dumbbell 1 3.3649e-07 156

- max\_picth\_arm 1 3.3652e-07 156

- var\_accel\_arm 1 3.3652e-07 156

- skewness\_pitch\_forearm 1 3.3656e-07 156

- gyros\_dumbbell\_x 1 3.3660e-07 156

- max\_yaw\_arm 1 3.3660e-07 156

- stddev\_yaw\_arm 1 3.3662e-07 156

- avg\_yaw\_arm 1 3.3666e-07 156

- min\_pitch\_dumbbell 1 3.3666e-07 156

- min\_pitch\_forearm 1 3.3666e-07 156

- var\_yaw\_forearm 1 3.3697e-07 156

- min\_yaw\_arm 1 3.3698e-07 156

- gyros\_dumbbell\_z 1 3.3704e-07 156

- kurtosis\_roll\_arm 1 3.3715e-07 156

- stddev\_yaw\_forearm 1 3.3718e-07 156

- total\_accel\_arm 1 3.3722e-07 156

- min\_roll\_arm 1 3.3735e-07 156

- gyros\_forearm\_x 1 3.3778e-07 156

- magnet\_forearm\_y 1 3.3784e-07 156

- max\_roll\_arm 1 3.3784e-07 156

- magnet\_belt\_y 1 3.3790e-07 156

- yaw\_forearm 1 3.3807e-07 156

- gyros\_arm\_x 1 3.3816e-07 156

- accel\_belt\_x 1 3.3845e-07 156

- magnet\_arm\_x 1 3.3888e-07 156

- gyros\_belt\_z 1 3.3908e-07 156

- total\_accel\_forearm 1 3.3930e-07 156

- roll\_belt 1 3.3960e-07 156

- roll\_arm 1 3.3965e-07 156

- accel\_dumbbell\_y 1 3.3970e-07 156

- gyros\_arm\_y 1 3.3970e-07 156

- magnet\_arm\_z 1 3.4027e-07 156

- yaw\_dumbbell 1 3.4080e-07 156

- gyros\_arm\_z 1 3.4095e-07 156

- cvtd\_timestamp 1 3.4095e-07 156

- accel\_dumbbell\_z 1 3.4147e-07 156

- accel\_belt\_y 1 3.4202e-07 156

- user\_name 1 3.4213e-07 156

- total\_accel\_belt 1 3.4252e-07 156

- magnet\_belt\_x 1 3.4352e-07 156

- magnet\_dumbbell\_x 1 3.4395e-07 156

- pitch\_belt 1 3.4435e-07 156

- accel\_forearm\_x 1 3.4486e-07 156

- roll\_dumbbell 1 3.4530e-07 156

- accel\_forearm\_z 1 3.4540e-07 156

- gyros\_belt\_y 1 3.4541e-07 156

- raw\_timestamp\_part\_2 1 3.4585e-07 156

- accel\_forearm\_y 1 3.4586e-07 156

- accel\_arm\_x 1 3.4589e-07 156

- pitch\_forearm 1 3.4624e-07 156

- gyros\_forearm\_y 1 3.4629e-07 156

- total\_accel\_dumbbell 1 3.4646e-07 156

- accel\_dumbbell\_x 1 3.4790e-07 156

- raw\_timestamp\_part\_1 1 3.4831e-07 156

- pitch\_dumbbell 1 3.4878e-07 156

- magnet\_belt\_z 1 3.4924e-07 156

- gyros\_forearm\_z 1 3.5119e-07 156

- accel\_arm\_z 1 3.5724e-07 156

- magnet\_forearm\_x 1 3.5745e-07 156

- magnet\_forearm\_z 1 3.6670e-07 156

- magnet\_arm\_y 1 3.8594e-07 156

- accel\_arm\_y 1 3.9622e-07 156

- pitch\_arm 1 4.1777e-07 156

- num\_window 1 1.1375e-06 156

<none> 3.3605e-07 158

Step: AIC=156

classe ~ user\_name + raw\_timestamp\_part\_1 + raw\_timestamp\_part\_2 +

cvtd\_timestamp + num\_window + roll\_belt + pitch\_belt + total\_accel\_belt +

kurtosis\_roll\_belt + skewness\_roll\_belt + max\_yaw\_belt +

min\_pitch\_belt + gyros\_belt\_x + gyros\_belt\_y + gyros\_belt\_z +

accel\_belt\_x + accel\_belt\_y + accel\_belt\_z + magnet\_belt\_x +

magnet\_belt\_y + magnet\_belt\_z + roll\_arm + pitch\_arm + total\_accel\_arm +

var\_accel\_arm + stddev\_roll\_arm + avg\_yaw\_arm + stddev\_yaw\_arm +

gyros\_arm\_x + gyros\_arm\_y + gyros\_arm\_z + accel\_arm\_x + accel\_arm\_y +

accel\_arm\_z + magnet\_arm\_x + magnet\_arm\_y + magnet\_arm\_z +

kurtosis\_roll\_arm + max\_roll\_arm + max\_picth\_arm + max\_yaw\_arm +

min\_roll\_arm + min\_yaw\_arm + roll\_dumbbell + pitch\_dumbbell +

yaw\_dumbbell + skewness\_pitch\_dumbbell + max\_roll\_dumbbell +

min\_pitch\_dumbbell + amplitude\_roll\_dumbbell + total\_accel\_dumbbell +

var\_roll\_dumbbell + gyros\_dumbbell\_x + gyros\_dumbbell\_z +

accel\_dumbbell\_x + accel\_dumbbell\_y + accel\_dumbbell\_z +

magnet\_dumbbell\_x + pitch\_forearm + yaw\_forearm + skewness\_pitch\_forearm

+

min\_pitch\_forearm + amplitude\_roll\_forearm + total\_accel\_forearm +

avg\_roll\_forearm + stddev\_pitch\_forearm + stddev\_yaw\_forearm +

var\_yaw\_forearm + gyros\_forearm\_x + gyros\_forearm\_y + gyros\_forearm\_z +

accel\_forearm\_x + accel\_forearm\_y + accel\_forearm\_z + magnet\_forearm\_x +

magnet\_forearm\_y + magnet\_forearm\_z

Df Deviance AIC

- skewness\_roll\_belt 1 3.3627e-07 154

- var\_roll\_dumbbell 1 3.3630e-07 154

- min\_pitch\_belt 1 3.3637e-07 154

- amplitude\_roll\_dumbbell 1 3.3639e-07 154

- stddev\_roll\_arm 1 3.3645e-07 154

- avg\_roll\_forearm 1 3.3645e-07 154

- gyros\_belt\_x 1 3.3648e-07 154

- max\_yaw\_belt 1 3.3650e-07 154

- kurtosis\_roll\_belt 1 3.3651e-07 154

- max\_roll\_dumbbell 1 3.3651e-07 154

- stddev\_pitch\_forearm 1 3.3652e-07 154

- amplitude\_roll\_forearm 1 3.3653e-07 154

- accel\_belt\_z 1 3.3654e-07 154

- max\_picth\_arm 1 3.3655e-07 154

- skewness\_pitch\_forearm 1 3.3659e-07 154

- skewness\_pitch\_dumbbell 1 3.3664e-07 154

- var\_accel\_arm 1 3.3665e-07 154

- stddev\_yaw\_arm 1 3.3667e-07 154

- max\_yaw\_arm 1 3.3670e-07 154

- avg\_yaw\_arm 1 3.3673e-07 154

- gyros\_dumbbell\_x 1 3.3673e-07 154

- min\_pitch\_forearm 1 3.3675e-07 154

- var\_yaw\_forearm 1 3.3698e-07 154

- min\_pitch\_dumbbell 1 3.3700e-07 154

- min\_yaw\_arm 1 3.3705e-07 154

- gyros\_dumbbell\_z 1 3.3707e-07 154

- stddev\_yaw\_forearm 1 3.3719e-07 154

- total\_accel\_arm 1 3.3725e-07 154

- kurtosis\_roll\_arm 1 3.3729e-07 154

- min\_roll\_arm 1 3.3736e-07 154

- max\_roll\_arm 1 3.3781e-07 154

- magnet\_forearm\_y 1 3.3793e-07 154

- gyros\_forearm\_x 1 3.3798e-07 154

- magnet\_belt\_y 1 3.3805e-07 154

- yaw\_forearm 1 3.3814e-07 154

- gyros\_arm\_x 1 3.3822e-07 154

- accel\_belt\_x 1 3.3861e-07 154

- magnet\_arm\_x 1 3.3899e-07 154

- gyros\_belt\_z 1 3.3917e-07 154

- total\_accel\_forearm 1 3.3944e-07 154

- roll\_belt 1 3.3975e-07 154

- roll\_arm 1 3.3976e-07 154

- gyros\_arm\_y 1 3.3978e-07 154

- accel\_dumbbell\_y 1 3.3979e-07 154

- magnet\_arm\_z 1 3.4039e-07 154

- yaw\_dumbbell 1 3.4079e-07 154

- gyros\_arm\_z 1 3.4096e-07 154

- cvtd\_timestamp 1 3.4097e-07 154

- accel\_dumbbell\_z 1 3.4159e-07 154

- accel\_belt\_y 1 3.4201e-07 154

- user\_name 1 3.4224e-07 154

- total\_accel\_belt 1 3.4273e-07 154

- magnet\_belt\_x 1 3.4354e-07 154

- magnet\_dumbbell\_x 1 3.4399e-07 154

- pitch\_belt 1 3.4442e-07 154

- accel\_forearm\_x 1 3.4494e-07 154

- roll\_dumbbell 1 3.4534e-07 154

- accel\_forearm\_z 1 3.4548e-07 154

- gyros\_belt\_y 1 3.4553e-07 154

- raw\_timestamp\_part\_2 1 3.4591e-07 154

- accel\_arm\_x 1 3.4598e-07 154

- accel\_forearm\_y 1 3.4612e-07 154

- gyros\_forearm\_y 1 3.4631e-07 154

- total\_accel\_dumbbell 1 3.4646e-07 154

- pitch\_forearm 1 3.4649e-07 154

- accel\_dumbbell\_x 1 3.4812e-07 154

- raw\_timestamp\_part\_1 1 3.4844e-07 154

- pitch\_dumbbell 1 3.4891e-07 154

- magnet\_belt\_z 1 3.4951e-07 154

- gyros\_forearm\_z 1 3.5126e-07 154

- accel\_arm\_z 1 3.5754e-07 154

- magnet\_forearm\_x 1 3.5775e-07 154

- magnet\_forearm\_z 1 3.6671e-07 154

- magnet\_arm\_y 1 3.8620e-07 154

- accel\_arm\_y 1 3.9653e-07 154

- pitch\_arm 1 4.1776e-07 154

- num\_window 1 1.1648e-06 154

<none> 3.3615e-07 156

Step: AIC=154

classe ~ user\_name + raw\_timestamp\_part\_1 + raw\_timestamp\_part\_2 +

cvtd\_timestamp + num\_window + roll\_belt + pitch\_belt + total\_accel\_belt +

kurtosis\_roll\_belt + max\_yaw\_belt + min\_pitch\_belt + gyros\_belt\_x +

gyros\_belt\_y + gyros\_belt\_z + accel\_belt\_x + accel\_belt\_y +

accel\_belt\_z + magnet\_belt\_x + magnet\_belt\_y + magnet\_belt\_z +

roll\_arm + pitch\_arm + total\_accel\_arm + var\_accel\_arm +

stddev\_roll\_arm + avg\_yaw\_arm + stddev\_yaw\_arm + gyros\_arm\_x +

gyros\_arm\_y + gyros\_arm\_z + accel\_arm\_x + accel\_arm\_y + accel\_arm\_z +

magnet\_arm\_x + magnet\_arm\_y + magnet\_arm\_z + kurtosis\_roll\_arm +

max\_roll\_arm + max\_picth\_arm + max\_yaw\_arm + min\_roll\_arm +

min\_yaw\_arm + roll\_dumbbell + pitch\_dumbbell + yaw\_dumbbell +

skewness\_pitch\_dumbbell + max\_roll\_dumbbell + min\_pitch\_dumbbell +

amplitude\_roll\_dumbbell + total\_accel\_dumbbell + var\_roll\_dumbbell +

gyros\_dumbbell\_x + gyros\_dumbbell\_z + accel\_dumbbell\_x +

accel\_dumbbell\_y + accel\_dumbbell\_z + magnet\_dumbbell\_x +

pitch\_forearm + yaw\_forearm + skewness\_pitch\_forearm + min\_pitch\_forearm

+

amplitude\_roll\_forearm + total\_accel\_forearm + avg\_roll\_forearm +

stddev\_pitch\_forearm + stddev\_yaw\_forearm + var\_yaw\_forearm +

gyros\_forearm\_x + gyros\_forearm\_y + gyros\_forearm\_z + accel\_forearm\_x +

accel\_forearm\_y + accel\_forearm\_z + magnet\_forearm\_x + magnet\_forearm\_y +

magnet\_forearm\_z

Df Deviance AIC

- avg\_roll\_forearm 1 3.3645e-07 152

- amplitude\_roll\_dumbbell 1 3.3647e-07 152

- var\_roll\_dumbbell 1 3.3648e-07 152

- stddev\_roll\_arm 1 3.3649e-07 152

- max\_yaw\_belt 1 3.3649e-07 152

- kurtosis\_roll\_belt 1 3.3650e-07 152

- min\_pitch\_belt 1 3.3651e-07 152

- var\_accel\_arm 1 3.3655e-07 152

- gyros\_belt\_x 1 3.3659e-07 152

- skewness\_pitch\_forearm 1 3.3661e-07 152

- accel\_belt\_z 1 3.3664e-07 152

- max\_yaw\_arm 1 3.3664e-07 152

- skewness\_pitch\_dumbbell 1 3.3664e-07 152

- max\_roll\_dumbbell 1 3.3667e-07 152

- stddev\_pitch\_forearm 1 3.3668e-07 152

- avg\_yaw\_arm 1 3.3669e-07 152

- max\_picth\_arm 1 3.3671e-07 152

- amplitude\_roll\_forearm 1 3.3673e-07 152

- stddev\_yaw\_arm 1 3.3682e-07 152

- min\_pitch\_forearm 1 3.3683e-07 152

- gyros\_dumbbell\_x 1 3.3695e-07 152

- min\_pitch\_dumbbell 1 3.3702e-07 152

- min\_yaw\_arm 1 3.3703e-07 152

- var\_yaw\_forearm 1 3.3705e-07 152

- gyros\_dumbbell\_z 1 3.3722e-07 152

- total\_accel\_arm 1 3.3734e-07 152

- stddev\_yaw\_forearm 1 3.3734e-07 152

- min\_roll\_arm 1 3.3736e-07 152

- kurtosis\_roll\_arm 1 3.3741e-07 152

- max\_roll\_arm 1 3.3780e-07 152

- gyros\_forearm\_x 1 3.3812e-07 152

- magnet\_belt\_y 1 3.3812e-07 152

- yaw\_forearm 1 3.3814e-07 152

- magnet\_forearm\_y 1 3.3816e-07 152

- gyros\_arm\_x 1 3.3820e-07 152

- accel\_belt\_x 1 3.3871e-07 152

- magnet\_arm\_x 1 3.3897e-07 152

- gyros\_belt\_z 1 3.3919e-07 152

- total\_accel\_forearm 1 3.3963e-07 152

- gyros\_arm\_y 1 3.3968e-07 152

- roll\_belt 1 3.3973e-07 152

- accel\_dumbbell\_y 1 3.3975e-07 152

- roll\_arm 1 3.3976e-07 152

- magnet\_arm\_z 1 3.4038e-07 152

- yaw\_dumbbell 1 3.4089e-07 152

- cvtd\_timestamp 1 3.4097e-07 152

- gyros\_arm\_z 1 3.4106e-07 152

- accel\_dumbbell\_z 1 3.4166e-07 152

- accel\_belt\_y 1 3.4194e-07 152

- user\_name 1 3.4224e-07 152

- total\_accel\_belt 1 3.4276e-07 152

- magnet\_belt\_x 1 3.4358e-07 152

- magnet\_dumbbell\_x 1 3.4410e-07 152

- pitch\_belt 1 3.4446e-07 152

- accel\_forearm\_x 1 3.4490e-07 152

- roll\_dumbbell 1 3.4524e-07 152

- accel\_forearm\_z 1 3.4543e-07 152

- gyros\_belt\_y 1 3.4565e-07 152

- raw\_timestamp\_part\_2 1 3.4590e-07 152

- accel\_arm\_x 1 3.4627e-07 152

- accel\_forearm\_y 1 3.4627e-07 152

- gyros\_forearm\_y 1 3.4641e-07 152

- pitch\_forearm 1 3.4655e-07 152

- total\_accel\_dumbbell 1 3.4662e-07 152

- accel\_dumbbell\_x 1 3.4821e-07 152

- raw\_timestamp\_part\_1 1 3.4849e-07 152

- pitch\_dumbbell 1 3.4903e-07 152

- magnet\_belt\_z 1 3.4943e-07 152

- gyros\_forearm\_z 1 3.5122e-07 152

- magnet\_forearm\_x 1 3.5782e-07 152

- accel\_arm\_z 1 3.5788e-07 152

- magnet\_forearm\_z 1 3.6695e-07 152

- magnet\_arm\_y 1 3.8648e-07 152

- accel\_arm\_y 1 3.9687e-07 152

- pitch\_arm 1 4.1804e-07 152

- num\_window 1 1.1340e-06 152

<none> 3.3627e-07 154

Step: AIC=152

classe ~ user\_name + raw\_timestamp\_part\_1 + raw\_timestamp\_part\_2 +

cvtd\_timestamp + num\_window + roll\_belt + pitch\_belt + total\_accel\_belt +

kurtosis\_roll\_belt + max\_yaw\_belt + min\_pitch\_belt + gyros\_belt\_x +

gyros\_belt\_y + gyros\_belt\_z + accel\_belt\_x + accel\_belt\_y +

accel\_belt\_z + magnet\_belt\_x + magnet\_belt\_y + magnet\_belt\_z +

roll\_arm + pitch\_arm + total\_accel\_arm + var\_accel\_arm +

stddev\_roll\_arm + avg\_yaw\_arm + stddev\_yaw\_arm + gyros\_arm\_x +

gyros\_arm\_y + gyros\_arm\_z + accel\_arm\_x + accel\_arm\_y + accel\_arm\_z +

magnet\_arm\_x + magnet\_arm\_y + magnet\_arm\_z + kurtosis\_roll\_arm +

max\_roll\_arm + max\_picth\_arm + max\_yaw\_arm + min\_roll\_arm +

min\_yaw\_arm + roll\_dumbbell + pitch\_dumbbell + yaw\_dumbbell +

skewness\_pitch\_dumbbell + max\_roll\_dumbbell + min\_pitch\_dumbbell +

amplitude\_roll\_dumbbell + total\_accel\_dumbbell + var\_roll\_dumbbell +

gyros\_dumbbell\_x + gyros\_dumbbell\_z + accel\_dumbbell\_x +

accel\_dumbbell\_y + accel\_dumbbell\_z + magnet\_dumbbell\_x +

pitch\_forearm + yaw\_forearm + skewness\_pitch\_forearm + min\_pitch\_forearm

+

amplitude\_roll\_forearm + total\_accel\_forearm + stddev\_pitch\_forearm +

stddev\_yaw\_forearm + var\_yaw\_forearm + gyros\_forearm\_x +

gyros\_forearm\_y + gyros\_forearm\_z + accel\_forearm\_x + accel\_forearm\_y +

accel\_forearm\_z + magnet\_forearm\_x + magnet\_forearm\_y + magnet\_forearm\_z

Df Deviance AIC

- max\_yaw\_belt 1 3.3663e-07 150

- kurtosis\_roll\_belt 1 3.3664e-07 150

- amplitude\_roll\_dumbbell 1 3.3666e-07 150

- stddev\_pitch\_forearm 1 3.3667e-07 150

- var\_accel\_arm 1 3.3670e-07 150

- stddev\_roll\_arm 1 3.3671e-07 150

- skewness\_pitch\_dumbbell 1 3.3675e-07 150

- gyros\_belt\_x 1 3.3676e-07 150

- max\_yaw\_arm 1 3.3680e-07 150

- var\_roll\_dumbbell 1 3.3681e-07 150

- amplitude\_roll\_forearm 1 3.3682e-07 150

- max\_picth\_arm 1 3.3686e-07 150

- max\_roll\_dumbbell 1 3.3686e-07 150

- accel\_belt\_z 1 3.3686e-07 150

- avg\_yaw\_arm 1 3.3690e-07 150

- skewness\_pitch\_forearm 1 3.3700e-07 150

- min\_pitch\_belt 1 3.3702e-07 150

- min\_yaw\_arm 1 3.3704e-07 150

- stddev\_yaw\_arm 1 3.3707e-07 150

- gyros\_dumbbell\_x 1 3.3708e-07 150

- var\_yaw\_forearm 1 3.3710e-07 150

- gyros\_dumbbell\_z 1 3.3731e-07 150

- min\_pitch\_dumbbell 1 3.3733e-07 150

- stddev\_yaw\_forearm 1 3.3733e-07 150

- kurtosis\_roll\_arm 1 3.3740e-07 150

- min\_roll\_arm 1 3.3750e-07 150

- total\_accel\_arm 1 3.3757e-07 150

- max\_roll\_arm 1 3.3780e-07 150

- min\_pitch\_forearm 1 3.3797e-07 150

- magnet\_belt\_y 1 3.3829e-07 150

- magnet\_forearm\_y 1 3.3834e-07 150

- gyros\_forearm\_x 1 3.3834e-07 150

- yaw\_forearm 1 3.3844e-07 150

- gyros\_arm\_x 1 3.3852e-07 150

- accel\_belt\_x 1 3.3891e-07 150

- magnet\_arm\_x 1 3.3937e-07 150

- gyros\_belt\_z 1 3.3941e-07 150

- total\_accel\_forearm 1 3.3978e-07 150

- accel\_dumbbell\_y 1 3.3983e-07 150

- roll\_belt 1 3.3996e-07 150

- roll\_arm 1 3.4005e-07 150

- gyros\_arm\_y 1 3.4008e-07 150

- magnet\_arm\_z 1 3.4057e-07 150

- yaw\_dumbbell 1 3.4105e-07 150

- gyros\_arm\_z 1 3.4117e-07 150

- cvtd\_timestamp 1 3.4120e-07 150

- accel\_dumbbell\_z 1 3.4169e-07 150

- accel\_belt\_y 1 3.4221e-07 150

- user\_name 1 3.4258e-07 150

- total\_accel\_belt 1 3.4323e-07 150

- magnet\_belt\_x 1 3.4389e-07 150

- magnet\_dumbbell\_x 1 3.4429e-07 150

- pitch\_belt 1 3.4461e-07 150

- accel\_forearm\_x 1 3.4514e-07 150

- roll\_dumbbell 1 3.4535e-07 150

- accel\_forearm\_z 1 3.4577e-07 150

- gyros\_belt\_y 1 3.4594e-07 150

- raw\_timestamp\_part\_2 1 3.4605e-07 150

- accel\_forearm\_y 1 3.4636e-07 150

- accel\_arm\_x 1 3.4653e-07 150

- gyros\_forearm\_y 1 3.4655e-07 150

- total\_accel\_dumbbell 1 3.4667e-07 150

- pitch\_forearm 1 3.4669e-07 150

- accel\_dumbbell\_x 1 3.4825e-07 150

- raw\_timestamp\_part\_1 1 3.4886e-07 150

- pitch\_dumbbell 1 3.4915e-07 150

- magnet\_belt\_z 1 3.4947e-07 150

- gyros\_forearm\_z 1 3.5171e-07 150

- magnet\_forearm\_x 1 3.5789e-07 150

- accel\_arm\_z 1 3.5812e-07 150

- magnet\_forearm\_z 1 3.6694e-07 150

- magnet\_arm\_y 1 3.8646e-07 150

- accel\_arm\_y 1 3.9671e-07 150

- pitch\_arm 1 4.1832e-07 150

- num\_window 1 1.1333e-06 150

<none> 3.3645e-07 152

Step: AIC=150

classe ~ user\_name + raw\_timestamp\_part\_1 + raw\_timestamp\_part\_2 +

cvtd\_timestamp + num\_window + roll\_belt + pitch\_belt + total\_accel\_belt +

kurtosis\_roll\_belt + min\_pitch\_belt + gyros\_belt\_x + gyros\_belt\_y +

gyros\_belt\_z + accel\_belt\_x + accel\_belt\_y + accel\_belt\_z +

magnet\_belt\_x + magnet\_belt\_y + magnet\_belt\_z + roll\_arm +

pitch\_arm + total\_accel\_arm + var\_accel\_arm + stddev\_roll\_arm +

avg\_yaw\_arm + stddev\_yaw\_arm + gyros\_arm\_x + gyros\_arm\_y +

gyros\_arm\_z + accel\_arm\_x + accel\_arm\_y + accel\_arm\_z + magnet\_arm\_x +

magnet\_arm\_y + magnet\_arm\_z + kurtosis\_roll\_arm + max\_roll\_arm +

max\_picth\_arm + max\_yaw\_arm + min\_roll\_arm + min\_yaw\_arm +

roll\_dumbbell + pitch\_dumbbell + yaw\_dumbbell + skewness\_pitch\_dumbbell +

max\_roll\_dumbbell + min\_pitch\_dumbbell + amplitude\_roll\_dumbbell +

total\_accel\_dumbbell + var\_roll\_dumbbell + gyros\_dumbbell\_x +

gyros\_dumbbell\_z + accel\_dumbbell\_x + accel\_dumbbell\_y +

accel\_dumbbell\_z + magnet\_dumbbell\_x + pitch\_forearm + yaw\_forearm +

skewness\_pitch\_forearm + min\_pitch\_forearm + amplitude\_roll\_forearm +

total\_accel\_forearm + stddev\_pitch\_forearm + stddev\_yaw\_forearm +

var\_yaw\_forearm + gyros\_forearm\_x + gyros\_forearm\_y + gyros\_forearm\_z +

accel\_forearm\_x + accel\_forearm\_y + accel\_forearm\_z + magnet\_forearm\_x +

magnet\_forearm\_y + magnet\_forearm\_z

Df Deviance AIC

- kurtosis\_roll\_belt 1 3.3661e-07 148

- stddev\_pitch\_forearm 1 3.3667e-07 148

- amplitude\_roll\_dumbbell 1 3.3670e-07 148

- stddev\_roll\_arm 1 3.3682e-07 148

- amplitude\_roll\_forearm 1 3.3687e-07 148

- max\_picth\_arm 1 3.3687e-07 148

- avg\_yaw\_arm 1 3.3687e-07 148

- var\_roll\_dumbbell 1 3.3690e-07 148

- max\_roll\_dumbbell 1 3.3691e-07 148

- skewness\_pitch\_dumbbell 1 3.3691e-07 148

- var\_accel\_arm 1 3.3692e-07 148

- gyros\_belt\_x 1 3.3697e-07 148

- skewness\_pitch\_forearm 1 3.3702e-07 148

- stddev\_yaw\_arm 1 3.3702e-07 148

- accel\_belt\_z 1 3.3705e-07 148

- min\_pitch\_belt 1 3.3706e-07 148

- max\_yaw\_arm 1 3.3707e-07 148

- var\_yaw\_forearm 1 3.3721e-07 148

- gyros\_dumbbell\_x 1 3.3727e-07 148

- min\_yaw\_arm 1 3.3729e-07 148

- kurtosis\_roll\_arm 1 3.3741e-07 148

- min\_pitch\_dumbbell 1 3.3745e-07 148

- gyros\_dumbbell\_z 1 3.3752e-07 148

- stddev\_yaw\_forearm 1 3.3753e-07 148

- total\_accel\_arm 1 3.3765e-07 148

- min\_pitch\_forearm 1 3.3801e-07 148

- min\_roll\_arm 1 3.3804e-07 148

- max\_roll\_arm 1 3.3832e-07 148

- magnet\_belt\_y 1 3.3849e-07 148

- gyros\_forearm\_x 1 3.3851e-07 148

- magnet\_forearm\_y 1 3.3852e-07 148

- yaw\_forearm 1 3.3858e-07 148

- gyros\_arm\_x 1 3.3870e-07 148

- accel\_belt\_x 1 3.3908e-07 148

- magnet\_arm\_x 1 3.3950e-07 148

- gyros\_belt\_z 1 3.3952e-07 148

- accel\_dumbbell\_y 1 3.4001e-07 148

- total\_accel\_forearm 1 3.4003e-07 148

- roll\_belt 1 3.4017e-07 148

- gyros\_arm\_y 1 3.4024e-07 148

- roll\_arm 1 3.4024e-07 148

- magnet\_arm\_z 1 3.4073e-07 148

- yaw\_dumbbell 1 3.4118e-07 148

- gyros\_arm\_z 1 3.4127e-07 148

- cvtd\_timestamp 1 3.4142e-07 148

- accel\_dumbbell\_z 1 3.4194e-07 148

- accel\_belt\_y 1 3.4256e-07 148

- user\_name 1 3.4272e-07 148

- total\_accel\_belt 1 3.4342e-07 148

- magnet\_belt\_x 1 3.4407e-07 148

- magnet\_dumbbell\_x 1 3.4457e-07 148

- pitch\_belt 1 3.4483e-07 148

- accel\_forearm\_x 1 3.4527e-07 148

- roll\_dumbbell 1 3.4545e-07 148

- accel\_forearm\_z 1 3.4588e-07 148

- gyros\_belt\_y 1 3.4611e-07 148

- raw\_timestamp\_part\_2 1 3.4622e-07 148

- accel\_forearm\_y 1 3.4664e-07 148

- accel\_arm\_x 1 3.4670e-07 148

- gyros\_forearm\_y 1 3.4675e-07 148

- pitch\_forearm 1 3.4686e-07 148

- total\_accel\_dumbbell 1 3.4693e-07 148

- accel\_dumbbell\_x 1 3.4863e-07 148

- raw\_timestamp\_part\_1 1 3.4903e-07 148

- pitch\_dumbbell 1 3.4946e-07 148

- magnet\_belt\_z 1 3.4982e-07 148

- gyros\_forearm\_z 1 3.5183e-07 148

- magnet\_forearm\_x 1 3.5805e-07 148

- accel\_arm\_z 1 3.5822e-07 148

- magnet\_forearm\_z 1 3.6704e-07 148

- magnet\_arm\_y 1 3.8671e-07 148

- accel\_arm\_y 1 3.9710e-07 148

- pitch\_arm 1 4.1863e-07 148

- num\_window 1 1.1263e-06 148

<none> 3.3663e-07 150

Step: AIC=148

classe ~ user\_name + raw\_timestamp\_part\_1 + raw\_timestamp\_part\_2 +

cvtd\_timestamp + num\_window + roll\_belt + pitch\_belt + total\_accel\_belt +

min\_pitch\_belt + gyros\_belt\_x + gyros\_belt\_y + gyros\_belt\_z +

accel\_belt\_x + accel\_belt\_y + accel\_belt\_z + magnet\_belt\_x +

magnet\_belt\_y + magnet\_belt\_z + roll\_arm + pitch\_arm + total\_accel\_arm +

var\_accel\_arm + stddev\_roll\_arm + avg\_yaw\_arm + stddev\_yaw\_arm +

gyros\_arm\_x + gyros\_arm\_y + gyros\_arm\_z + accel\_arm\_x + accel\_arm\_y +

accel\_arm\_z + magnet\_arm\_x + magnet\_arm\_y + magnet\_arm\_z +

kurtosis\_roll\_arm + max\_roll\_arm + max\_picth\_arm + max\_yaw\_arm +

min\_roll\_arm + min\_yaw\_arm + roll\_dumbbell + pitch\_dumbbell +

yaw\_dumbbell + skewness\_pitch\_dumbbell + max\_roll\_dumbbell +

min\_pitch\_dumbbell + amplitude\_roll\_dumbbell + total\_accel\_dumbbell +

var\_roll\_dumbbell + gyros\_dumbbell\_x + gyros\_dumbbell\_z +

accel\_dumbbell\_x + accel\_dumbbell\_y + accel\_dumbbell\_z +

magnet\_dumbbell\_x + pitch\_forearm + yaw\_forearm + skewness\_pitch\_forearm

+

min\_pitch\_forearm + amplitude\_roll\_forearm + total\_accel\_forearm +

stddev\_pitch\_forearm + stddev\_yaw\_forearm + var\_yaw\_forearm +

gyros\_forearm\_x + gyros\_forearm\_y + gyros\_forearm\_z + accel\_forearm\_x +

accel\_forearm\_y + accel\_forearm\_z + magnet\_forearm\_x + magnet\_forearm\_y +

magnet\_forearm\_z

Df Deviance AIC

- stddev\_pitch\_forearm 1 3.3664e-07 146

- amplitude\_roll\_forearm 1 3.3680e-07 146

- var\_accel\_arm 1 3.3683e-07 146

- amplitude\_roll\_dumbbell 1 3.3683e-07 146

- skewness\_pitch\_dumbbell 1 3.3685e-07 146

- max\_roll\_dumbbell 1 3.3686e-07 146

- avg\_yaw\_arm 1 3.3689e-07 146

- stddev\_roll\_arm 1 3.3690e-07 146

- max\_picth\_arm 1 3.3693e-07 146

- gyros\_belt\_x 1 3.3694e-07 146

- stddev\_yaw\_arm 1 3.3694e-07 146

- max\_yaw\_arm 1 3.3700e-07 146

- accel\_belt\_z 1 3.3701e-07 146

- min\_pitch\_belt 1 3.3702e-07 146

- var\_roll\_dumbbell 1 3.3705e-07 146

- var\_yaw\_forearm 1 3.3709e-07 146

- skewness\_pitch\_forearm 1 3.3714e-07 146

- gyros\_dumbbell\_x 1 3.3724e-07 146

- min\_yaw\_arm 1 3.3725e-07 146

- stddev\_yaw\_forearm 1 3.3741e-07 146

- kurtosis\_roll\_arm 1 3.3741e-07 146

- min\_pitch\_dumbbell 1 3.3744e-07 146

- gyros\_dumbbell\_z 1 3.3754e-07 146

- total\_accel\_arm 1 3.3758e-07 146

- min\_roll\_arm 1 3.3796e-07 146

- min\_pitch\_forearm 1 3.3798e-07 146

- yaw\_forearm 1 3.3844e-07 146

- gyros\_forearm\_x 1 3.3847e-07 146

- magnet\_belt\_y 1 3.3852e-07 146

- magnet\_forearm\_y 1 3.3853e-07 146

- max\_roll\_arm 1 3.3864e-07 146

- gyros\_arm\_x 1 3.3872e-07 146

- accel\_belt\_x 1 3.3903e-07 146

- magnet\_arm\_x 1 3.3948e-07 146

- gyros\_belt\_z 1 3.3951e-07 146

- accel\_dumbbell\_y 1 3.3999e-07 146

- total\_accel\_forearm 1 3.4001e-07 146

- roll\_belt 1 3.4009e-07 146

- gyros\_arm\_y 1 3.4020e-07 146

- roll\_arm 1 3.4021e-07 146

- magnet\_arm\_z 1 3.4072e-07 146

- yaw\_dumbbell 1 3.4112e-07 146

- gyros\_arm\_z 1 3.4134e-07 146

- cvtd\_timestamp 1 3.4142e-07 146

- accel\_dumbbell\_z 1 3.4195e-07 146

- accel\_belt\_y 1 3.4251e-07 146

- user\_name 1 3.4273e-07 146

- total\_accel\_belt 1 3.4334e-07 146

- magnet\_belt\_x 1 3.4408e-07 146

- magnet\_dumbbell\_x 1 3.4464e-07 146

- pitch\_belt 1 3.4484e-07 146

- accel\_forearm\_x 1 3.4526e-07 146

- roll\_dumbbell 1 3.4532e-07 146

- accel\_forearm\_z 1 3.4580e-07 146

- gyros\_belt\_y 1 3.4613e-07 146

- raw\_timestamp\_part\_2 1 3.4620e-07 146

- accel\_arm\_x 1 3.4662e-07 146

- gyros\_forearm\_y 1 3.4673e-07 146

- accel\_forearm\_y 1 3.4676e-07 146

- pitch\_forearm 1 3.4687e-07 146

- total\_accel\_dumbbell 1 3.4700e-07 146

- accel\_dumbbell\_x 1 3.4865e-07 146

- raw\_timestamp\_part\_1 1 3.4913e-07 146

- pitch\_dumbbell 1 3.4953e-07 146

- magnet\_belt\_z 1 3.4978e-07 146

- gyros\_forearm\_z 1 3.5183e-07 146

- magnet\_forearm\_x 1 3.5797e-07 146

- accel\_arm\_z 1 3.5838e-07 146

- magnet\_forearm\_z 1 3.6706e-07 146

- magnet\_arm\_y 1 3.8676e-07 146

- accel\_arm\_y 1 3.9712e-07 146

- pitch\_arm 1 4.1863e-07 146

- num\_window 1 1.1267e-06 146

<none> 3.3661e-07 148

Step: AIC=146

classe ~ user\_name + raw\_timestamp\_part\_1 + raw\_timestamp\_part\_2 +

cvtd\_timestamp + num\_window + roll\_belt + pitch\_belt + total\_accel\_belt +

min\_pitch\_belt + gyros\_belt\_x + gyros\_belt\_y + gyros\_belt\_z +

accel\_belt\_x + accel\_belt\_y + accel\_belt\_z + magnet\_belt\_x +

magnet\_belt\_y + magnet\_belt\_z + roll\_arm + pitch\_arm + total\_accel\_arm +

var\_accel\_arm + stddev\_roll\_arm + avg\_yaw\_arm + stddev\_yaw\_arm +

gyros\_arm\_x + gyros\_arm\_y + gyros\_arm\_z + accel\_arm\_x + accel\_arm\_y +

accel\_arm\_z + magnet\_arm\_x + magnet\_arm\_y + magnet\_arm\_z +

kurtosis\_roll\_arm + max\_roll\_arm + max\_picth\_arm + max\_yaw\_arm +

min\_roll\_arm + min\_yaw\_arm + roll\_dumbbell + pitch\_dumbbell +

yaw\_dumbbell + skewness\_pitch\_dumbbell + max\_roll\_dumbbell +

min\_pitch\_dumbbell + amplitude\_roll\_dumbbell + total\_accel\_dumbbell +

var\_roll\_dumbbell + gyros\_dumbbell\_x + gyros\_dumbbell\_z +

accel\_dumbbell\_x + accel\_dumbbell\_y + accel\_dumbbell\_z +

magnet\_dumbbell\_x + pitch\_forearm + yaw\_forearm + skewness\_pitch\_forearm

+

min\_pitch\_forearm + amplitude\_roll\_forearm + total\_accel\_forearm +

stddev\_yaw\_forearm + var\_yaw\_forearm + gyros\_forearm\_x +

gyros\_forearm\_y + gyros\_forearm\_z + accel\_forearm\_x + accel\_forearm\_y +

accel\_forearm\_z + magnet\_forearm\_x + magnet\_forearm\_y + magnet\_forearm\_z

- roll\_arm 1 3.4066e-07 140

- gyros\_arm\_y 1 3.4071e-07 140

- magnet\_arm\_z 1 3.4117e-07 140

- yaw\_dumbbell 1 3.4129e-07 140

- gyros\_arm\_z 1 3.4156e-07 140

- cvtd\_timestamp 1 3.4164e-07 140

- accel\_dumbbell\_z 1 3.4204e-07 140

- accel\_belt\_y 1 3.4266e-07 140

- user\_name 1 3.4308e-07 140

- total\_accel\_belt 1 3.4355e-07 140

- magnet\_belt\_x 1 3.4456e-07 140

- magnet\_dumbbell\_x 1 3.4474e-07 140

- pitch\_belt 1 3.4518e-07 140

- accel\_forearm\_x 1 3.4540e-07 140

- roll\_dumbbell 1 3.4564e-07 140

- accel\_forearm\_z 1 3.4630e-07 140

- raw\_timestamp\_part\_2 1 3.4642e-07 140

- gyros\_belt\_y 1 3.4661e-07 140

- accel\_forearm\_y 1 3.4687e-07 140

- accel\_arm\_x 1 3.4689e-07 140

- gyros\_forearm\_y 1 3.4699e-07 140

- pitch\_forearm 1 3.4701e-07 140

- total\_accel\_dumbbell 1 3.4711e-07 140

- accel\_dumbbell\_x 1 3.4872e-07 140

- pitch\_dumbbell 1 3.4964e-07 140

- raw\_timestamp\_part\_1 1 3.4978e-07 140

- magnet\_belt\_z 1 3.5009e-07 140

- gyros\_forearm\_z 1 3.5206e-07 140

- magnet\_forearm\_x 1 3.5820e-07 140

- accel\_arm\_z 1 3.5864e-07 140

- magnet\_forearm\_z 1 3.6745e-07 140

- magnet\_arm\_y 1 3.8710e-07 140

- accel\_arm\_y 1 3.9734e-07 140

- pitch\_arm 1 4.1884e-07 140

- num\_window 1 1.1271e-06 140

<none> 3.3694e-07 142

Step: AIC=140

classe ~ user\_name + raw\_timestamp\_part\_1 + raw\_timestamp\_part\_2 +

cvtd\_timestamp + num\_window + roll\_belt + pitch\_belt + total\_accel\_belt +

min\_pitch\_belt + gyros\_belt\_x + gyros\_belt\_y + gyros\_belt\_z +

accel\_belt\_x + accel\_belt\_y + accel\_belt\_z + magnet\_belt\_x +

magnet\_belt\_y + magnet\_belt\_z + roll\_arm + pitch\_arm + total\_accel\_arm +

var\_accel\_arm + stddev\_yaw\_arm + gyros\_arm\_x + gyros\_arm\_y +

gyros\_arm\_z + accel\_arm\_x + accel\_arm\_y + accel\_arm\_z + magnet\_arm\_x +

magnet\_arm\_y + magnet\_arm\_z + kurtosis\_roll\_arm + max\_roll\_arm +

max\_picth\_arm + max\_yaw\_arm + min\_roll\_arm + min\_yaw\_arm +

roll\_dumbbell + pitch\_dumbbell + yaw\_dumbbell + skewness\_pitch\_dumbbell +

max\_roll\_dumbbell + min\_pitch\_dumbbell + amplitude\_roll\_dumbbell +

total\_accel\_dumbbell + var\_roll\_dumbbell + gyros\_dumbbell\_x +

gyros\_dumbbell\_z + accel\_dumbbell\_x + accel\_dumbbell\_y +

accel\_dumbbell\_z + magnet\_dumbbell\_x + pitch\_forearm + yaw\_forearm +

skewness\_pitch\_forearm + min\_pitch\_forearm + total\_accel\_forearm +

stddev\_yaw\_forearm + var\_yaw\_forearm + gyros\_forearm\_x +

gyros\_forearm\_y + gyros\_forearm\_z + accel\_forearm\_x + accel\_forearm\_y +

accel\_forearm\_z + magnet\_forearm\_x + magnet\_forearm\_y + magnet\_forearm\_z

Df Deviance AIC

- max\_picth\_arm 1 3.3716e-07 138

- stddev\_yaw\_arm 1 3.3735e-07 138

- skewness\_pitch\_dumbbell 1 3.3737e-07 138

- var\_accel\_arm 1 3.3739e-07 138

- gyros\_belt\_x 1 3.3748e-07 138

- skewness\_pitch\_forearm 1 3.3750e-07 138

- accel\_belt\_z 1 3.3760e-07 138

- min\_pitch\_belt 1 3.3767e-07 138

- max\_yaw\_arm 1 3.3771e-07 138

- gyros\_dumbbell\_x 1 3.3774e-07 138

- min\_pitch\_dumbbell 1 3.3778e-07 138

- min\_yaw\_arm 1 3.3778e-07 138

- kurtosis\_roll\_arm 1 3.3779e-07 138

- var\_roll\_dumbbell 1 3.3779e-07 138

- max\_roll\_dumbbell 1 3.3781e-07 138

- amplitude\_roll\_dumbbell 1 3.3784e-07 138

- gyros\_dumbbell\_z 1 3.3800e-07 138

- total\_accel\_arm 1 3.3803e-07 138

- min\_pitch\_forearm 1 3.3839e-07 138

- stddev\_yaw\_forearm 1 3.3841e-07 138

- var\_yaw\_forearm 1 3.3842e-07 138

- min\_roll\_arm 1 3.3861e-07 138

- max\_roll\_arm 1 3.3881e-07 138

- gyros\_forearm\_x 1 3.3886e-07 138

- magnet\_belt\_y 1 3.3891e-07 138

- magnet\_forearm\_y 1 3.3898e-07 138

- yaw\_forearm 1 3.3923e-07 138

- gyros\_arm\_x 1 3.3944e-07 138

- accel\_belt\_x 1 3.3965e-07 138

- magnet\_arm\_x 1 3.4018e-07 138

- accel\_dumbbell\_y 1 3.4023e-07 138

- gyros\_belt\_z 1 3.4025e-07 138

- total\_accel\_forearm 1 3.4039e-07 138

- roll\_belt 1 3.4045e-07 138

- roll\_arm 1 3.4069e-07 138

- gyros\_arm\_y 1 3.4104e-07 138

- magnet\_arm\_z 1 3.4131e-07 138

- yaw\_dumbbell 1 3.4148e-07 138

- gyros\_arm\_z 1 3.4168e-07 138

- cvtd\_timestamp 1 3.4182e-07 138

- accel\_dumbbell\_z 1 3.4212e-07 138

- accel\_belt\_y 1 3.4286e-07 138

- user\_name 1 3.4322e-07 138

- total\_accel\_belt 1 3.4372e-07 138

- magnet\_dumbbell\_x 1 3.4485e-07 138

- magnet\_belt\_x 1 3.4487e-07 138

- pitch\_belt 1 3.4527e-07 138

- accel\_forearm\_x 1 3.4549e-07 138

- roll\_dumbbell 1 3.4584e-07 138

- accel\_forearm\_z 1 3.4638e-07 138

- raw\_timestamp\_part\_2 1 3.4664e-07 138

- gyros\_belt\_y 1 3.4683e-07 138

- accel\_forearm\_y 1 3.4697e-07 138

- accel\_arm\_x 1 3.4701e-07 138

- pitch\_forearm 1 3.4708e-07 138

- gyros\_forearm\_y 1 3.4709e-07 138

- total\_accel\_dumbbell 1 3.4725e-07 138

- accel\_dumbbell\_x 1 3.4876e-07 138

- pitch\_dumbbell 1 3.4971e-07 138

- raw\_timestamp\_part\_1 1 3.4980e-07 138

- magnet\_belt\_z 1 3.5028e-07 138

- gyros\_forearm\_z 1 3.5211e-07 138

- magnet\_forearm\_x 1 3.5821e-07 138

- accel\_arm\_z 1 3.5887e-07 138

- magnet\_forearm\_z 1 3.6787e-07 138

- magnet\_arm\_y 1 3.8710e-07 138

- accel\_arm\_y 1 3.9735e-07 138

- pitch\_arm 1 4.1885e-07 138

- num\_window 1 1.1280e-06 138

<none> 3.3712e-07 140

Step: AIC=138

classe ~ user\_name + raw\_timestamp\_part\_1 + raw\_timestamp\_part\_2 +

cvtd\_timestamp + num\_window + roll\_belt + pitch\_belt + total\_accel\_belt +

min\_pitch\_belt + gyros\_belt\_x + gyros\_belt\_y + gyros\_belt\_z +

accel\_belt\_x + accel\_belt\_y + accel\_belt\_z + magnet\_belt\_x +

magnet\_belt\_y + magnet\_belt\_z + roll\_arm + pitch\_arm + total\_accel\_arm +

var\_accel\_arm + stddev\_yaw\_arm + gyros\_arm\_x + gyros\_arm\_y +

gyros\_arm\_z + accel\_arm\_x + accel\_arm\_y + accel\_arm\_z + magnet\_arm\_x +

magnet\_arm\_y + magnet\_arm\_z + kurtosis\_roll\_arm + max\_roll\_arm +

max\_yaw\_arm + min\_roll\_arm + min\_yaw\_arm + roll\_dumbbell +

pitch\_dumbbell + yaw\_dumbbell + skewness\_pitch\_dumbbell +

max\_roll\_dumbbell + min\_pitch\_dumbbell + amplitude\_roll\_dumbbell +

total\_accel\_dumbbell + var\_roll\_dumbbell + gyros\_dumbbell\_x +

gyros\_dumbbell\_z + accel\_dumbbell\_x + accel\_dumbbell\_y +

accel\_dumbbell\_z + magnet\_dumbbell\_x + pitch\_forearm + yaw\_forearm +

skewness\_pitch\_forearm + min\_pitch\_forearm + total\_accel\_forearm +

stddev\_yaw\_forearm + var\_yaw\_forearm + gyros\_forearm\_x +

gyros\_forearm\_y + gyros\_forearm\_z + accel\_forearm\_x + accel\_forearm\_y +

accel\_forearm\_z + magnet\_forearm\_x + magnet\_forearm\_y + magnet\_forearm\_z

Df Deviance AIC

- var\_accel\_arm 1 3.3737e-07 136

- stddev\_yaw\_arm 1 3.3738e-07 136

- skewness\_pitch\_dumbbell 1 3.3740e-07 136

- gyros\_belt\_x 1 3.3749e-07 136

- skewness\_pitch\_forearm 1 3.3757e-07 136

- accel\_belt\_z 1 3.3762e-07 136

- min\_pitch\_belt 1 3.3774e-07 136

- var\_roll\_dumbbell 1 3.3774e-07 136

- max\_yaw\_arm 1 3.3775e-07 136

- gyros\_dumbbell\_x 1 3.3777e-07 136

- min\_pitch\_dumbbell 1 3.3779e-07 136

- min\_yaw\_arm 1 3.3781e-07 136

- amplitude\_roll\_dumbbell 1 3.3787e-07 136

- max\_roll\_dumbbell 1 3.3788e-07 136

- kurtosis\_roll\_arm 1 3.3803e-07 136

- gyros\_dumbbell\_z 1 3.3805e-07 136

- total\_accel\_arm 1 3.3809e-07 136

- min\_pitch\_forearm 1 3.3842e-07 136

- stddev\_yaw\_forearm 1 3.3844e-07 136

- var\_yaw\_forearm 1 3.3844e-07 136

- gyros\_forearm\_x 1 3.3888e-07 136

- magnet\_belt\_y 1 3.3893e-07 136

- max\_roll\_arm 1 3.3894e-07 136

- min\_roll\_arm 1 3.3894e-07 136

- magnet\_forearm\_y 1 3.3901e-07 136

- yaw\_forearm 1 3.3926e-07 136

- gyros\_arm\_x 1 3.3943e-07 136

- accel\_belt\_x 1 3.3967e-07 136

- magnet\_arm\_x 1 3.4015e-07 136

- gyros\_belt\_z 1 3.4029e-07 136

- accel\_dumbbell\_y 1 3.4031e-07 136

- total\_accel\_forearm 1 3.4038e-07 136

- roll\_belt 1 3.4047e-07 136

- roll\_arm 1 3.4068e-07 136

- gyros\_arm\_y 1 3.4102e-07 136

- magnet\_arm\_z 1 3.4135e-07 136

- yaw\_dumbbell 1 3.4155e-07 136

- gyros\_arm\_z 1 3.4174e-07 136

- cvtd\_timestamp 1 3.4185e-07 136

- accel\_dumbbell\_z 1 3.4219e-07 136

- accel\_belt\_y 1 3.4290e-07 136

- user\_name 1 3.4329e-07 136

- total\_accel\_belt 1 3.4384e-07 136

- magnet\_dumbbell\_x 1 3.4479e-07 136

- magnet\_belt\_x 1 3.4487e-07 136

- pitch\_belt 1 3.4529e-07 136

- accel\_forearm\_x 1 3.4549e-07 136

- roll\_dumbbell 1 3.4584e-07 136

- accel\_forearm\_z 1 3.4643e-07 136

- raw\_timestamp\_part\_2 1 3.4662e-07 136

- gyros\_belt\_y 1 3.4687e-07 136

- accel\_forearm\_y 1 3.4700e-07 136

- accel\_arm\_x 1 3.4701e-07 136

- gyros\_forearm\_y 1 3.4713e-07 136

- pitch\_forearm 1 3.4720e-07 136

- total\_accel\_dumbbell 1 3.4725e-07 136

- accel\_dumbbell\_x 1 3.4875e-07 136

- pitch\_dumbbell 1 3.4974e-07 136

- raw\_timestamp\_part\_1 1 3.4986e-07 136

- magnet\_belt\_z 1 3.5035e-07 136

- gyros\_forearm\_z 1 3.5232e-07 136

- magnet\_forearm\_x 1 3.5827e-07 136

- accel\_arm\_z 1 3.5886e-07 136

- magnet\_forearm\_z 1 3.6801e-07 136

- magnet\_arm\_y 1 3.8705e-07 136

- accel\_arm\_y 1 3.9730e-07 136

- pitch\_arm 1 4.1905e-07 136

- num\_window 1 1.1312e-06 136

<none> 3.3716e-07 138

Step: AIC=136

classe ~ user\_name + raw\_timestamp\_part\_1 + raw\_timestamp\_part\_2 +

cvtd\_timestamp + num\_window + roll\_belt + pitch\_belt + total\_accel\_belt +

min\_pitch\_belt + gyros\_belt\_x + gyros\_belt\_y + gyros\_belt\_z +

accel\_belt\_x + accel\_belt\_y + accel\_belt\_z + magnet\_belt\_x +

magnet\_belt\_y + magnet\_belt\_z + roll\_arm + pitch\_arm + total\_accel\_arm +

stddev\_yaw\_arm + gyros\_arm\_x + gyros\_arm\_y + gyros\_arm\_z +

accel\_arm\_x + accel\_arm\_y + accel\_arm\_z + magnet\_arm\_x +

magnet\_arm\_y + magnet\_arm\_z + kurtosis\_roll\_arm + max\_roll\_arm +

max\_yaw\_arm + min\_roll\_arm + min\_yaw\_arm + roll\_dumbbell +

pitch\_dumbbell + yaw\_dumbbell + skewness\_pitch\_dumbbell +

max\_roll\_dumbbell + min\_pitch\_dumbbell + amplitude\_roll\_dumbbell +

total\_accel\_dumbbell + var\_roll\_dumbbell + gyros\_dumbbell\_x +

gyros\_dumbbell\_z + accel\_dumbbell\_x + accel\_dumbbell\_y +

accel\_dumbbell\_z + magnet\_dumbbell\_x + pitch\_forearm + yaw\_forearm +

skewness\_pitch\_forearm + min\_pitch\_forearm + total\_accel\_forearm +

stddev\_yaw\_forearm + var\_yaw\_forearm + gyros\_forearm\_x +

gyros\_forearm\_y + gyros\_forearm\_z + accel\_forearm\_x + accel\_forearm\_y +

accel\_forearm\_z + magnet\_forearm\_x + magnet\_forearm\_y + magnet\_forearm\_z

Df Deviance AIC

- skewness\_pitch\_dumbbell 1 3.3739e-07 134

- stddev\_yaw\_arm 1 3.3741e-07 134

- skewness\_pitch\_forearm 1 3.3758e-07 134

- gyros\_belt\_x 1 3.3772e-07 134

- min\_pitch\_belt 1 3.3777e-07 134

- accel\_belt\_z 1 3.3789e-07 134

- gyros\_dumbbell\_x 1 3.3790e-07 134

- max\_roll\_dumbbell 1 3.3792e-07 134

- amplitude\_roll\_dumbbell 1 3.3796e-07 134

- kurtosis\_roll\_arm 1 3.3801e-07 134

- max\_yaw\_arm 1 3.3804e-07 134

- var\_roll\_dumbbell 1 3.3806e-07 134

- min\_yaw\_arm 1 3.3808e-07 134

- min\_pitch\_dumbbell 1 3.3808e-07 134

- gyros\_dumbbell\_z 1 3.3817e-07 134

- total\_accel\_arm 1 3.3828e-07 134

- min\_pitch\_forearm 1 3.3859e-07 134

- var\_yaw\_forearm 1 3.3880e-07 134

- stddev\_yaw\_forearm 1 3.3888e-07 134

- max\_roll\_arm 1 3.3898e-07 134

- gyros\_forearm\_x 1 3.3899e-07 134

- min\_roll\_arm 1 3.3907e-07 134

- magnet\_belt\_y 1 3.3910e-07 134

- magnet\_forearm\_y 1 3.3916e-07 134

- yaw\_forearm 1 3.3951e-07 134

- gyros\_arm\_x 1 3.3961e-07 134

- accel\_belt\_x 1 3.3983e-07 134

- magnet\_arm\_x 1 3.4034e-07 134

- accel\_dumbbell\_y 1 3.4043e-07 134

- total\_accel\_forearm 1 3.4048e-07 134

- gyros\_belt\_z 1 3.4054e-07 134

- roll\_belt 1 3.4062e-07 134

- roll\_arm 1 3.4086e-07 134

- gyros\_arm\_y 1 3.4120e-07 134

- magnet\_arm\_z 1 3.4165e-07 134

- yaw\_dumbbell 1 3.4170e-07 134

- gyros\_arm\_z 1 3.4184e-07 134

- cvtd\_timestamp 1 3.4202e-07 134

- accel\_dumbbell\_z 1 3.4226e-07 134

- accel\_belt\_y 1 3.4314e-07 134

- user\_name 1 3.4348e-07 134

- total\_accel\_belt 1 3.4418e-07 134

- magnet\_belt\_x 1 3.4495e-07 134

- magnet\_dumbbell\_x 1 3.4499e-07 134

- pitch\_belt 1 3.4552e-07 134

- accel\_forearm\_x 1 3.4574e-07 134

- roll\_dumbbell 1 3.4596e-07 134

- accel\_forearm\_z 1 3.4648e-07 134

- raw\_timestamp\_part\_2 1 3.4696e-07 134

- accel\_arm\_x 1 3.4703e-07 134

- gyros\_belt\_y 1 3.4704e-07 134

- accel\_forearm\_y 1 3.4722e-07 134

- gyros\_forearm\_y 1 3.4736e-07 134

- pitch\_forearm 1 3.4737e-07 134

- total\_accel\_dumbbell 1 3.4739e-07 134

- accel\_dumbbell\_x 1 3.4896e-07 134

- pitch\_dumbbell 1 3.4985e-07 134

- raw\_timestamp\_part\_1 1 3.5003e-07 134

- magnet\_belt\_z 1 3.5066e-07 134

- gyros\_forearm\_z 1 3.5235e-07 134

- magnet\_forearm\_x 1 3.5870e-07 134

- accel\_arm\_z 1 3.5889e-07 134

- magnet\_forearm\_z 1 3.6820e-07 134

- magnet\_arm\_y 1 3.8737e-07 134

- accel\_arm\_y 1 3.9731e-07 134

- pitch\_arm 1 4.1921e-07 134

- num\_window 1 1.1823e-06 134

<none> 3.3737e-07 136

Step: AIC=134

classe ~ user\_name + raw\_timestamp\_part\_1 + raw\_timestamp\_part\_2 +

cvtd\_timestamp + num\_window + roll\_belt + pitch\_belt + total\_accel\_belt +

min\_pitch\_belt + gyros\_belt\_x + gyros\_belt\_y + gyros\_belt\_z +

accel\_belt\_x + accel\_belt\_y + accel\_belt\_z + magnet\_belt\_x +

magnet\_belt\_y + magnet\_belt\_z + roll\_arm + pitch\_arm + total\_accel\_arm +

stddev\_yaw\_arm + gyros\_arm\_x + gyros\_arm\_y + gyros\_arm\_z +

accel\_arm\_x + accel\_arm\_y + accel\_arm\_z + magnet\_arm\_x +

magnet\_arm\_y + magnet\_arm\_z + kurtosis\_roll\_arm + max\_roll\_arm +

max\_yaw\_arm + min\_roll\_arm + min\_yaw\_arm + roll\_dumbbell +

pitch\_dumbbell + yaw\_dumbbell + max\_roll\_dumbbell + min\_pitch\_dumbbell +

amplitude\_roll\_dumbbell + total\_accel\_dumbbell + var\_roll\_dumbbell +

gyros\_dumbbell\_x + gyros\_dumbbell\_z + accel\_dumbbell\_x +

accel\_dumbbell\_y + accel\_dumbbell\_z + magnet\_dumbbell\_x +

pitch\_forearm + yaw\_forearm + skewness\_pitch\_forearm + min\_pitch\_forearm

+

total\_accel\_forearm + stddev\_yaw\_forearm + var\_yaw\_forearm +

gyros\_forearm\_x + gyros\_forearm\_y + gyros\_forearm\_z + accel\_forearm\_x +

accel\_forearm\_y + accel\_forearm\_z + magnet\_forearm\_x + magnet\_forearm\_y +

magnet\_forearm\_z

Df Deviance AIC

- stddev\_yaw\_arm 1 3.3753e-07 132

- gyros\_belt\_x 1 3.3773e-07 132

- accel\_belt\_z 1 3.3782e-07 132

- min\_pitch\_belt 1 3.3797e-07 132

- gyros\_dumbbell\_x 1 3.3797e-07 132

- kurtosis\_roll\_arm 1 3.3803e-07 132

- amplitude\_roll\_dumbbell 1 3.3803e-07 132

- max\_yaw\_arm 1 3.3806e-07 132

- max\_roll\_dumbbell 1 3.3807e-07 132

- skewness\_pitch\_forearm 1 3.3810e-07 132

- min\_yaw\_arm 1 3.3811e-07 132

- min\_pitch\_dumbbell 1 3.3815e-07 132

- var\_roll\_dumbbell 1 3.3825e-07 132

- total\_accel\_arm 1 3.3832e-07 132

- gyros\_dumbbell\_z 1 3.3837e-07 132

- min\_pitch\_forearm 1 3.3882e-07 132

- gyros\_forearm\_x 1 3.3898e-07 132

- magnet\_belt\_y 1 3.3910e-07 132

- magnet\_forearm\_y 1 3.3918e-07 132

- var\_yaw\_forearm 1 3.3919e-07 132

- stddev\_yaw\_forearm 1 3.3924e-07 132

- max\_roll\_arm 1 3.3933e-07 132

- min\_roll\_arm 1 3.3942e-07 132

- yaw\_forearm 1 3.3952e-07 132

- gyros\_arm\_x 1 3.3961e-07 132

- accel\_belt\_x 1 3.3987e-07 132

- magnet\_arm\_x 1 3.4036e-07 132

- accel\_dumbbell\_y 1 3.4046e-07 132

- gyros\_belt\_z 1 3.4051e-07 132

- total\_accel\_forearm 1 3.4054e-07 132

- roll\_belt 1 3.4078e-07 132

- roll\_arm 1 3.4090e-07 132

- gyros\_arm\_y 1 3.4118e-07 132

- magnet\_arm\_z 1 3.4160e-07 132

- yaw\_dumbbell 1 3.4176e-07 132

- gyros\_arm\_z 1 3.4191e-07 132

- cvtd\_timestamp 1 3.4205e-07 132

- accel\_dumbbell\_z 1 3.4230e-07 132

- accel\_belt\_y 1 3.4315e-07 132

- user\_name 1 3.4355e-07 132

- total\_accel\_belt 1 3.4421e-07 132

- magnet\_dumbbell\_x 1 3.4504e-07 132

- magnet\_belt\_x 1 3.4507e-07 132

- pitch\_belt 1 3.4562e-07 132

- accel\_forearm\_x 1 3.4578e-07 132

- roll\_dumbbell 1 3.4613e-07 132

- accel\_forearm\_z 1 3.4647e-07 132

- gyros\_belt\_y 1 3.4705e-07 132

- accel\_arm\_x 1 3.4707e-07 132

- raw\_timestamp\_part\_2 1 3.4709e-07 132

- accel\_forearm\_y 1 3.4721e-07 132

- pitch\_forearm 1 3.4736e-07 132

- gyros\_forearm\_y 1 3.4742e-07 132

- total\_accel\_dumbbell 1 3.4746e-07 132

- accel\_dumbbell\_x 1 3.4901e-07 132

- pitch\_dumbbell 1 3.4986e-07 132

- raw\_timestamp\_part\_1 1 3.5002e-07 132

- magnet\_belt\_z 1 3.5070e-07 132

- gyros\_forearm\_z 1 3.5233e-07 132

- magnet\_forearm\_x 1 3.5870e-07 132

- accel\_arm\_z 1 3.5896e-07 132

- magnet\_forearm\_z 1 3.6822e-07 132

- magnet\_arm\_y 1 3.8735e-07 132

- accel\_arm\_y 1 3.9716e-07 132

- pitch\_arm 1 4.1933e-07 132

- num\_window 1 1.1315e-06 132

<none> 3.3739e-07 134

Step: AIC=132

classe ~ user\_name + raw\_timestamp\_part\_1 + raw\_timestamp\_part\_2 +

cvtd\_timestamp + num\_window + roll\_belt + pitch\_belt + total\_accel\_belt +

min\_pitch\_belt + gyros\_belt\_x + gyros\_belt\_y + gyros\_belt\_z +

accel\_belt\_x + accel\_belt\_y + accel\_belt\_z + magnet\_belt\_x +

magnet\_belt\_y + magnet\_belt\_z + roll\_arm + pitch\_arm + total\_accel\_arm +

gyros\_arm\_x + gyros\_arm\_y + gyros\_arm\_z + accel\_arm\_x + accel\_arm\_y +

accel\_arm\_z + magnet\_arm\_x + magnet\_arm\_y + magnet\_arm\_z +

kurtosis\_roll\_arm + max\_roll\_arm + max\_yaw\_arm + min\_roll\_arm +

min\_yaw\_arm + roll\_dumbbell + pitch\_dumbbell + yaw\_dumbbell +

max\_roll\_dumbbell + min\_pitch\_dumbbell + amplitude\_roll\_dumbbell +

total\_accel\_dumbbell + var\_roll\_dumbbell + gyros\_dumbbell\_x +

gyros\_dumbbell\_z + accel\_dumbbell\_x + accel\_dumbbell\_y +

accel\_dumbbell\_z + magnet\_dumbbell\_x + pitch\_forearm + yaw\_forearm +

skewness\_pitch\_forearm + min\_pitch\_forearm + total\_accel\_forearm +

stddev\_yaw\_forearm + var\_yaw\_forearm + gyros\_forearm\_x +

gyros\_forearm\_y + gyros\_forearm\_z + accel\_forearm\_x + accel\_forearm\_y +

accel\_forearm\_z + magnet\_forearm\_x + magnet\_forearm\_y + magnet\_forearm\_z

Df Deviance AIC

- gyros\_belt\_x 1 3.3791e-07 130

- amplitude\_roll\_dumbbell 1 3.3793e-07 130

- max\_roll\_dumbbell 1 3.3797e-07 130

- min\_pitch\_belt 1 3.3798e-07 130

- accel\_belt\_z 1 3.3802e-07 130

- kurtosis\_roll\_arm 1 3.3806e-07 130

- gyros\_dumbbell\_x 1 3.3807e-07 130

- skewness\_pitch\_forearm 1 3.3813e-07 130

- var\_roll\_dumbbell 1 3.3816e-07 130

- gyros\_dumbbell\_z 1 3.3819e-07 130

- min\_pitch\_dumbbell 1 3.3828e-07 130

- total\_accel\_arm 1 3.3829e-07 130

- max\_yaw\_arm 1 3.3833e-07 130

- min\_yaw\_arm 1 3.3845e-07 130

- min\_pitch\_forearm 1 3.3901e-07 130

- gyros\_forearm\_x 1 3.3917e-07 130

- magnet\_belt\_y 1 3.3926e-07 130

- var\_yaw\_forearm 1 3.3928e-07 130

- stddev\_yaw\_forearm 1 3.3934e-07 130

- magnet\_forearm\_y 1 3.3936e-07 130

- max\_roll\_arm 1 3.3945e-07 130

- min\_roll\_arm 1 3.3945e-07 130

- yaw\_forearm 1 3.3961e-07 130

- gyros\_arm\_x 1 3.3965e-07 130

- accel\_belt\_x 1 3.4002e-07 130

- magnet\_arm\_x 1 3.4037e-07 130

- accel\_dumbbell\_y 1 3.4043e-07 130

- roll\_belt 1 3.4066e-07 130

- gyros\_belt\_z 1 3.4071e-07 130

- total\_accel\_forearm 1 3.4073e-07 130

- roll\_arm 1 3.4079e-07 130

- gyros\_arm\_y 1 3.4121e-07 130

- magnet\_arm\_z 1 3.4160e-07 130

- yaw\_dumbbell 1 3.4181e-07 130

- gyros\_arm\_z 1 3.4195e-07 130

- cvtd\_timestamp 1 3.4211e-07 130

- accel\_dumbbell\_z 1 3.4233e-07 130

- accel\_belt\_y 1 3.4301e-07 130

- user\_name 1 3.4364e-07 130

- total\_accel\_belt 1 3.4404e-07 130

- magnet\_belt\_x 1 3.4516e-07 130

- magnet\_dumbbell\_x 1 3.4521e-07 130

- accel\_forearm\_x 1 3.4556e-07 130

- pitch\_belt 1 3.4570e-07 130

- roll\_dumbbell 1 3.4587e-07 130

- accel\_forearm\_z 1 3.4659e-07 130

- raw\_timestamp\_part\_2 1 3.4692e-07 130

- gyros\_belt\_y 1 3.4715e-07 130

- accel\_arm\_x 1 3.4721e-07 130

- gyros\_forearm\_y 1 3.4730e-07 130

- accel\_forearm\_y 1 3.4734e-07 130

- pitch\_forearm 1 3.4739e-07 130

- total\_accel\_dumbbell 1 3.4763e-07 130

- accel\_dumbbell\_x 1 3.4895e-07 130

- pitch\_dumbbell 1 3.4988e-07 130

- raw\_timestamp\_part\_1 1 3.5024e-07 130

- magnet\_belt\_z 1 3.5063e-07 130

- gyros\_forearm\_z 1 3.5244e-07 130

- magnet\_forearm\_x 1 3.5873e-07 130

- accel\_arm\_z 1 3.5925e-07 130

- magnet\_forearm\_z 1 3.6824e-07 130

- magnet\_arm\_y 1 3.8746e-07 130

- accel\_arm\_y 1 3.9721e-07 130

- pitch\_arm 1 4.1936e-07 130

- num\_window 1 1.1312e-06 130

<none> 3.3753e-07 132

Step: AIC=130

classe ~ user\_name + raw\_timestamp\_part\_1 + raw\_timestamp\_part\_2 +

cvtd\_timestamp + num\_window + roll\_belt + pitch\_belt + total\_accel\_belt +

min\_pitch\_belt + gyros\_belt\_y + gyros\_belt\_z + accel\_belt\_x +

accel\_belt\_y + accel\_belt\_z + magnet\_belt\_x + magnet\_belt\_y +

magnet\_belt\_z + roll\_arm + pitch\_arm + total\_accel\_arm +

gyros\_arm\_x + gyros\_arm\_y + gyros\_arm\_z + accel\_arm\_x + accel\_arm\_y +

accel\_arm\_z + magnet\_arm\_x + magnet\_arm\_y + magnet\_arm\_z +

kurtosis\_roll\_arm + max\_roll\_arm + max\_yaw\_arm + min\_roll\_arm +

min\_yaw\_arm + roll\_dumbbell + pitch\_dumbbell + yaw\_dumbbell +

max\_roll\_dumbbell + min\_pitch\_dumbbell + amplitude\_roll\_dumbbell +

total\_accel\_dumbbell + var\_roll\_dumbbell + gyros\_dumbbell\_x +

gyros\_dumbbell\_z + accel\_dumbbell\_x + accel\_dumbbell\_y +

accel\_dumbbell\_z + magnet\_dumbbell\_x + pitch\_forearm + yaw\_forearm +

skewness\_pitch\_forearm + min\_pitch\_forearm + total\_accel\_forearm +

stddev\_yaw\_forearm + var\_yaw\_forearm + gyros\_forearm\_x +

gyros\_forearm\_y + gyros\_forearm\_z + accel\_forearm\_x + accel\_forearm\_y +

accel\_forearm\_z + magnet\_forearm\_x + magnet\_forearm\_y + magnet\_forearm\_z

Df Deviance AIC

- gyros\_dumbbell\_x 1 3.3830e-07 128

- amplitude\_roll\_dumbbell 1 3.3831e-07 128

- min\_pitch\_belt 1 3.3834e-07 128

- max\_roll\_dumbbell 1 3.3835e-07 128

- kurtosis\_roll\_arm 1 3.3843e-07 128

- skewness\_pitch\_forearm 1 3.3846e-07 128

- accel\_belt\_z 1 3.3851e-07 128

- var\_roll\_dumbbell 1 3.3852e-07 128

- min\_pitch\_dumbbell 1 3.3863e-07 128

- max\_yaw\_arm 1 3.3865e-07 128

- min\_yaw\_arm 1 3.3878e-07 128

- gyros\_forearm\_x 1 3.3913e-07 128

- gyros\_dumbbell\_z 1 3.3925e-07 128

- min\_pitch\_forearm 1 3.3933e-07 128

- var\_yaw\_forearm 1 3.3959e-07 128

- stddev\_yaw\_forearm 1 3.3963e-07 128

- min\_roll\_arm 1 3.3974e-07 128

- max\_roll\_arm 1 3.3976e-07 128

- total\_accel\_arm 1 3.3988e-07 128

- yaw\_forearm 1 3.3995e-07 128

- magnet\_forearm\_y 1 3.4006e-07 128

- gyros\_arm\_x 1 3.4013e-07 128

- accel\_belt\_x 1 3.4019e-07 128

- magnet\_belt\_y 1 3.4021e-07 128

- gyros\_belt\_z 1 3.4084e-07 128

- roll\_arm 1 3.4086e-07 128

- total\_accel\_forearm 1 3.4102e-07 128

- gyros\_arm\_y 1 3.4160e-07 128

- roll\_belt 1 3.4164e-07 128

- accel\_dumbbell\_y 1 3.4208e-07 128

- magnet\_arm\_x 1 3.4210e-07 128

- magnet\_arm\_z 1 3.4211e-07 128

- cvtd\_timestamp 1 3.4297e-07 128

- accel\_dumbbell\_z 1 3.4306e-07 128

- yaw\_dumbbell 1 3.4307e-07 128

- accel\_belt\_y 1 3.4348e-07 128

- gyros\_arm\_z 1 3.4369e-07 128

- user\_name 1 3.4433e-07 128

- total\_accel\_belt 1 3.4448e-07 128

- magnet\_dumbbell\_x 1 3.4543e-07 128

- pitch\_belt 1 3.4667e-07 128

- accel\_forearm\_z 1 3.4671e-07 128

- accel\_forearm\_x 1 3.4691e-07 128

- magnet\_belt\_x 1 3.4706e-07 128

- roll\_dumbbell 1 3.4747e-07 128

- raw\_timestamp\_part\_2 1 3.4764e-07 128

- gyros\_belt\_y 1 3.4785e-07 128

- accel\_arm\_x 1 3.4789e-07 128

- accel\_forearm\_y 1 3.4789e-07 128

- gyros\_forearm\_y 1 3.4833e-07 128

- pitch\_forearm 1 3.4881e-07 128

- accel\_dumbbell\_x 1 3.4918e-07 128

- pitch\_dumbbell 1 3.5029e-07 128

- total\_accel\_dumbbell 1 3.5082e-07 128

- raw\_timestamp\_part\_1 1 3.5196e-07 128

- gyros\_forearm\_z 1 3.5674e-07 128

- magnet\_belt\_z 1 3.5733e-07 128

- accel\_arm\_z 1 3.6022e-07 128

- magnet\_forearm\_x 1 3.6118e-07 128

- magnet\_forearm\_z 1 3.7052e-07 128

- magnet\_arm\_y 1 3.8815e-07 128

- accel\_arm\_y 1 4.0310e-07 128

- pitch\_arm 1 4.2025e-07 128

- num\_window 1 1.3929e-06 128

<none> 3.3791e-07 130

Step: AIC=128

classe ~ user\_name + raw\_timestamp\_part\_1 + raw\_timestamp\_part\_2 +

cvtd\_timestamp + num\_window + roll\_belt + pitch\_belt + total\_accel\_belt +

min\_pitch\_belt + gyros\_belt\_y + gyros\_belt\_z + accel\_belt\_x +

accel\_belt\_y + accel\_belt\_z + magnet\_belt\_x + magnet\_belt\_y +

magnet\_belt\_z + roll\_arm + pitch\_arm + total\_accel\_arm +

gyros\_arm\_x + gyros\_arm\_y + gyros\_arm\_z + accel\_arm\_x + accel\_arm\_y +

accel\_arm\_z + magnet\_arm\_x + magnet\_arm\_y + magnet\_arm\_z +

kurtosis\_roll\_arm + max\_roll\_arm + max\_yaw\_arm + min\_roll\_arm +

min\_yaw\_arm + roll\_dumbbell + pitch\_dumbbell + yaw\_dumbbell +

max\_roll\_dumbbell + min\_pitch\_dumbbell + amplitude\_roll\_dumbbell +

total\_accel\_dumbbell + var\_roll\_dumbbell + gyros\_dumbbell\_z +

accel\_dumbbell\_x + accel\_dumbbell\_y + accel\_dumbbell\_z +

magnet\_dumbbell\_x + pitch\_forearm + yaw\_forearm + skewness\_pitch\_forearm

+

min\_pitch\_forearm + total\_accel\_forearm + stddev\_yaw\_forearm +

var\_yaw\_forearm + gyros\_forearm\_x + gyros\_forearm\_y + gyros\_forearm\_z +

accel\_forearm\_x + accel\_forearm\_y + accel\_forearm\_z + magnet\_forearm\_x +

magnet\_forearm\_y + magnet\_forearm\_z

Df Deviance AIC

- amplitude\_roll\_dumbbell 1 3.3855e-07 126

- max\_roll\_dumbbell 1 3.3865e-07 126

- min\_pitch\_belt 1 3.3874e-07 126

- var\_roll\_dumbbell 1 3.3880e-07 126

- kurtosis\_roll\_arm 1 3.3885e-07 126

- skewness\_pitch\_forearm 1 3.3889e-07 126

- max\_yaw\_arm 1 3.3894e-07 126

- accel\_belt\_z 1 3.3906e-07 126

- min\_pitch\_dumbbell 1 3.3910e-07 126

- min\_yaw\_arm 1 3.3912e-07 126

- gyros\_forearm\_x 1 3.3940e-07 126

- min\_pitch\_forearm 1 3.3973e-07 126

- total\_accel\_arm 1 3.3980e-07 126

- var\_yaw\_forearm 1 3.3983e-07 126

- gyros\_dumbbell\_z 1 3.3988e-07 126

- stddev\_yaw\_forearm 1 3.3989e-07 126

- min\_roll\_arm 1 3.3999e-07 126

- max\_roll\_arm 1 3.4003e-07 126

- magnet\_forearm\_y 1 3.4014e-07 126

- magnet\_belt\_y 1 3.4015e-07 126

- accel\_belt\_x 1 3.4015e-07 126

- yaw\_forearm 1 3.4077e-07 126

- gyros\_arm\_x 1 3.4119e-07 126

- total\_accel\_forearm 1 3.4121e-07 126

- roll\_belt 1 3.4146e-07 126

- roll\_arm 1 3.4155e-07 126

- accel\_dumbbell\_y 1 3.4197e-07 126

- magnet\_arm\_z 1 3.4212e-07 126

- gyros\_belt\_z 1 3.4259e-07 126

- accel\_dumbbell\_z 1 3.4292e-07 126

- gyros\_arm\_y 1 3.4336e-07 126

- cvtd\_timestamp 1 3.4339e-07 126

- magnet\_arm\_x 1 3.4360e-07 126

- yaw\_dumbbell 1 3.4368e-07 126

- gyros\_arm\_z 1 3.4384e-07 126

- user\_name 1 3.4475e-07 126

- accel\_belt\_y 1 3.4477e-07 126

- magnet\_dumbbell\_x 1 3.4567e-07 126

- pitch\_belt 1 3.4684e-07 126

- total\_accel\_belt 1 3.4706e-07 126

- accel\_forearm\_z 1 3.4709e-07 126

- accel\_forearm\_x 1 3.4717e-07 126

- magnet\_belt\_x 1 3.4758e-07 126

- roll\_dumbbell 1 3.4775e-07 126

- accel\_forearm\_y 1 3.4780e-07 126

- accel\_arm\_x 1 3.4793e-07 126

- gyros\_forearm\_y 1 3.4843e-07 126

- raw\_timestamp\_part\_2 1 3.4845e-07 126

- gyros\_belt\_y 1 3.4878e-07 126

- accel\_dumbbell\_x 1 3.4893e-07 126

- pitch\_forearm 1 3.4913e-07 126

- pitch\_dumbbell 1 3.5032e-07 126

- total\_accel\_dumbbell 1 3.5071e-07 126

- raw\_timestamp\_part\_1 1 3.5198e-07 126

- gyros\_forearm\_z 1 3.5660e-07 126

- magnet\_belt\_z 1 3.5797e-07 126

- accel\_arm\_z 1 3.6025e-07 126

- magnet\_forearm\_x 1 3.6152e-07 126

- magnet\_forearm\_z 1 3.7196e-07 126

- magnet\_arm\_y 1 3.8869e-07 126

- accel\_arm\_y 1 4.0290e-07 126

- pitch\_arm 1 4.1974e-07 126

- num\_window 1 1.5807e-06 126

<none> 3.3830e-07 128

Step: AIC=126

classe ~ user\_name + raw\_timestamp\_part\_1 + raw\_timestamp\_part\_2 +

cvtd\_timestamp + num\_window + roll\_belt + pitch\_belt + total\_accel\_belt +

min\_pitch\_belt + gyros\_belt\_y + gyros\_belt\_z + accel\_belt\_x +

accel\_belt\_y + accel\_belt\_z + magnet\_belt\_x + magnet\_belt\_y +

magnet\_belt\_z + roll\_arm + pitch\_arm + total\_accel\_arm +

gyros\_arm\_x + gyros\_arm\_y + gyros\_arm\_z + accel\_arm\_x + accel\_arm\_y +

accel\_arm\_z + magnet\_arm\_x + magnet\_arm\_y + magnet\_arm\_z +

kurtosis\_roll\_arm + max\_roll\_arm + max\_yaw\_arm + min\_roll\_arm +

min\_yaw\_arm + roll\_dumbbell + pitch\_dumbbell + yaw\_dumbbell +

max\_roll\_dumbbell + min\_pitch\_dumbbell + total\_accel\_dumbbell +

var\_roll\_dumbbell + gyros\_dumbbell\_z + accel\_dumbbell\_x +

accel\_dumbbell\_y + accel\_dumbbell\_z + magnet\_dumbbell\_x +

pitch\_forearm + yaw\_forearm + skewness\_pitch\_forearm + min\_pitch\_forearm

+

total\_accel\_forearm + stddev\_yaw\_forearm + var\_yaw\_forearm +

gyros\_forearm\_x + gyros\_forearm\_y + gyros\_forearm\_z + accel\_forearm\_x +

accel\_forearm\_y + accel\_forearm\_z + magnet\_forearm\_x + magnet\_forearm\_y +

magnet\_forearm\_z

Df Deviance AIC

- max\_roll\_dumbbell 1 3.3862e-07 124

- var\_roll\_dumbbell 1 3.3874e-07 124

- min\_pitch\_belt 1 3.3876e-07 124

- kurtosis\_roll\_arm 1 3.3892e-07 124

- skewness\_pitch\_forearm 1 3.3904e-07 124

- min\_yaw\_arm 1 3.3912e-07 124

- max\_yaw\_arm 1 3.3925e-07 124

- accel\_belt\_z 1 3.3932e-07 124

- min\_pitch\_dumbbell 1 3.3969e-07 124

- gyros\_forearm\_x 1 3.3970e-07 124

- min\_pitch\_forearm 1 3.3974e-07 124

- var\_yaw\_forearm 1 3.3990e-07 124

- stddev\_yaw\_forearm 1 3.3995e-07 124

- max\_roll\_arm 1 3.4007e-07 124

- gyros\_dumbbell\_z 1 3.4010e-07 124

- min\_roll\_arm 1 3.4011e-07 124

- total\_accel\_arm 1 3.4013e-07 124

- magnet\_forearm\_y 1 3.4028e-07 124

- accel\_belt\_x 1 3.4038e-07 124

- magnet\_belt\_y 1 3.4055e-07 124

- yaw\_forearm 1 3.4122e-07 124

- total\_accel\_forearm 1 3.4140e-07 124

- gyros\_arm\_x 1 3.4143e-07 124

- roll\_belt 1 3.4170e-07 124

- roll\_arm 1 3.4175e-07 124

- magnet\_arm\_z 1 3.4238e-07 124

- accel\_dumbbell\_y 1 3.4253e-07 124

- gyros\_belt\_z 1 3.4319e-07 124

- accel\_dumbbell\_z 1 3.4326e-07 124

- magnet\_arm\_x 1 3.4379e-07 124

- gyros\_arm\_y 1 3.4386e-07 124

- cvtd\_timestamp 1 3.4387e-07 124

- yaw\_dumbbell 1 3.4400e-07 124

- gyros\_arm\_z 1 3.4421e-07 124

- user\_name 1 3.4533e-07 124

- accel\_belt\_y 1 3.4552e-07 124

- magnet\_dumbbell\_x 1 3.4582e-07 124

- pitch\_belt 1 3.4736e-07 124

- total\_accel\_belt 1 3.4763e-07 124

- accel\_forearm\_x 1 3.4770e-07 124

- accel\_forearm\_z 1 3.4777e-07 124

- accel\_forearm\_y 1 3.4796e-07 124

- magnet\_belt\_x 1 3.4810e-07 124

- roll\_dumbbell 1 3.4834e-07 124

- accel\_arm\_x 1 3.4837e-07 124

- raw\_timestamp\_part\_2 1 3.4886e-07 124

- gyros\_forearm\_y 1 3.4902e-07 124

- gyros\_belt\_y 1 3.4916e-07 124

- accel\_dumbbell\_x 1 3.4924e-07 124

- pitch\_forearm 1 3.4963e-07 124

- pitch\_dumbbell 1 3.5078e-07 124

- total\_accel\_dumbbell 1 3.5110e-07 124

- raw\_timestamp\_part\_1 1 3.5249e-07 124

- gyros\_forearm\_z 1 3.5694e-07 124

- magnet\_belt\_z 1 3.5866e-07 124

- accel\_arm\_z 1 3.6034e-07 124

- magnet\_forearm\_x 1 3.6243e-07 124

- magnet\_forearm\_z 1 3.7262e-07 124

- magnet\_arm\_y 1 3.8953e-07 124

- accel\_arm\_y 1 4.0370e-07 124

- pitch\_arm 1 4.2045e-07 124

- num\_window 1 1.5816e-06 124

<none> 3.3855e-07 126

Step: AIC=124

classe ~ user\_name + raw\_timestamp\_part\_1 + raw\_timestamp\_part\_2 +

cvtd\_timestamp + num\_window + roll\_belt + pitch\_belt + total\_accel\_belt +

min\_pitch\_belt + gyros\_belt\_y + gyros\_belt\_z + accel\_belt\_x +

accel\_belt\_y + accel\_belt\_z + magnet\_belt\_x + magnet\_belt\_y +

magnet\_belt\_z + roll\_arm + pitch\_arm + total\_accel\_arm +

gyros\_arm\_x + gyros\_arm\_y + gyros\_arm\_z + accel\_arm\_x + accel\_arm\_y +

accel\_arm\_z + magnet\_arm\_x + magnet\_arm\_y + magnet\_arm\_z +

kurtosis\_roll\_arm + max\_roll\_arm + max\_yaw\_arm + min\_roll\_arm +

min\_yaw\_arm + roll\_dumbbell + pitch\_dumbbell + yaw\_dumbbell +

min\_pitch\_dumbbell + total\_accel\_dumbbell + var\_roll\_dumbbell +

gyros\_dumbbell\_z + accel\_dumbbell\_x + accel\_dumbbell\_y +

accel\_dumbbell\_z + magnet\_dumbbell\_x + pitch\_forearm + yaw\_forearm +

skewness\_pitch\_forearm + min\_pitch\_forearm + total\_accel\_forearm +

stddev\_yaw\_forearm + var\_yaw\_forearm + gyros\_forearm\_x +

gyros\_forearm\_y + gyros\_forearm\_z + accel\_forearm\_x + accel\_forearm\_y +

accel\_forearm\_z + magnet\_forearm\_x + magnet\_forearm\_y + magnet\_forearm\_z

Df Deviance AIC

- min\_pitch\_belt 1 3.3882e-07 122

- var\_roll\_dumbbell 1 3.3883e-07 122

- kurtosis\_roll\_arm 1 3.3894e-07 122

- skewness\_pitch\_forearm 1 3.3908e-07 122

- min\_yaw\_arm 1 3.3936e-07 122

- max\_yaw\_arm 1 3.3937e-07 122

- accel\_belt\_z 1 3.3945e-07 122

- min\_pitch\_dumbbell 1 3.3972e-07 122

- gyros\_forearm\_x 1 3.3976e-07 122

- min\_pitch\_forearm 1 3.3981e-07 122

- var\_yaw\_forearm 1 3.4008e-07 122

- gyros\_dumbbell\_z 1 3.4012e-07 122

- stddev\_yaw\_forearm 1 3.4015e-07 122

- total\_accel\_arm 1 3.4017e-07 122

- max\_roll\_arm 1 3.4028e-07 122

- min\_roll\_arm 1 3.4035e-07 122

- magnet\_forearm\_y 1 3.4039e-07 122

- accel\_belt\_x 1 3.4046e-07 122

- magnet\_belt\_y 1 3.4061e-07 122

- yaw\_forearm 1 3.4127e-07 122

- gyros\_arm\_x 1 3.4154e-07 122

- total\_accel\_forearm 1 3.4155e-07 122

- roll\_belt 1 3.4173e-07 122

- roll\_arm 1 3.4180e-07 122

- magnet\_arm\_z 1 3.4246e-07 122

- accel\_dumbbell\_y 1 3.4255e-07 122

- gyros\_belt\_z 1 3.4319e-07 122

- accel\_dumbbell\_z 1 3.4333e-07 122

- gyros\_arm\_y 1 3.4385e-07 122

- magnet\_arm\_x 1 3.4389e-07 122

- cvtd\_timestamp 1 3.4398e-07 122

- yaw\_dumbbell 1 3.4401e-07 122

- gyros\_arm\_z 1 3.4422e-07 122

- user\_name 1 3.4532e-07 122

- accel\_belt\_y 1 3.4561e-07 122

- magnet\_dumbbell\_x 1 3.4587e-07 122

- pitch\_belt 1 3.4739e-07 122

- total\_accel\_belt 1 3.4758e-07 122

- accel\_forearm\_x 1 3.4784e-07 122

- accel\_forearm\_z 1 3.4785e-07 122

- accel\_forearm\_y 1 3.4813e-07 122

- magnet\_belt\_x 1 3.4819e-07 122

- accel\_arm\_x 1 3.4835e-07 122

- roll\_dumbbell 1 3.4848e-07 122

- raw\_timestamp\_part\_2 1 3.4901e-07 122

- gyros\_forearm\_y 1 3.4915e-07 122

- accel\_dumbbell\_x 1 3.4933e-07 122

- gyros\_belt\_y 1 3.4936e-07 122

- pitch\_forearm 1 3.4964e-07 122

- pitch\_dumbbell 1 3.5084e-07 122

- total\_accel\_dumbbell 1 3.5118e-07 122

- raw\_timestamp\_part\_1 1 3.5247e-07 122

- gyros\_forearm\_z 1 3.5713e-07 122

- magnet\_belt\_z 1 3.5881e-07 122

- accel\_arm\_z 1 3.6037e-07 122

- magnet\_forearm\_x 1 3.6244e-07 122

- magnet\_forearm\_z 1 3.7250e-07 122

- magnet\_arm\_y 1 3.8955e-07 122

- accel\_arm\_y 1 4.0374e-07 122

- pitch\_arm 1 4.2039e-07 122

- num\_window 1 1.5841e-06 122

<none> 3.3862e-07 124

Step: AIC=122

classe ~ user\_name + raw\_timestamp\_part\_1 + raw\_timestamp\_part\_2 +

cvtd\_timestamp + num\_window + roll\_belt + pitch\_belt + total\_accel\_belt +

gyros\_belt\_y + gyros\_belt\_z + accel\_belt\_x + accel\_belt\_y +

accel\_belt\_z + magnet\_belt\_x + magnet\_belt\_y + magnet\_belt\_z +

roll\_arm + pitch\_arm + total\_accel\_arm + gyros\_arm\_x + gyros\_arm\_y +

gyros\_arm\_z + accel\_arm\_x + accel\_arm\_y + accel\_arm\_z + magnet\_arm\_x +

magnet\_arm\_y + magnet\_arm\_z + kurtosis\_roll\_arm + max\_roll\_arm +

max\_yaw\_arm + min\_roll\_arm + min\_yaw\_arm + roll\_dumbbell +

pitch\_dumbbell + yaw\_dumbbell + min\_pitch\_dumbbell + total\_accel\_dumbbell

+

var\_roll\_dumbbell + gyros\_dumbbell\_z + accel\_dumbbell\_x +

accel\_dumbbell\_y + accel\_dumbbell\_z + magnet\_dumbbell\_x +

pitch\_forearm + yaw\_forearm + skewness\_pitch\_forearm + min\_pitch\_forearm

+

total\_accel\_forearm + stddev\_yaw\_forearm + var\_yaw\_forearm +

gyros\_forearm\_x + gyros\_forearm\_y + gyros\_forearm\_z + accel\_forearm\_x +

accel\_forearm\_y + accel\_forearm\_z + magnet\_forearm\_x + magnet\_forearm\_y +

magnet\_forearm\_z

Df Deviance AIC

- var\_roll\_dumbbell 1 3.3885e-07 120

- kurtosis\_roll\_arm 1 3.3902e-07 120

- skewness\_pitch\_forearm 1 3.3919e-07 120

- max\_yaw\_arm 1 3.3941e-07 120

- min\_yaw\_arm 1 3.3942e-07 120

- accel\_belt\_z 1 3.3953e-07 120

- min\_pitch\_forearm 1 3.3982e-07 120

- gyros\_forearm\_x 1 3.3999e-07 120

- gyros\_dumbbell\_z 1 3.4034e-07 120

- min\_pitch\_dumbbell 1 3.4042e-07 120

- var\_yaw\_forearm 1 3.4042e-07 120

- min\_roll\_arm 1 3.4044e-07 120

- max\_roll\_arm 1 3.4048e-07 120

- total\_accel\_arm 1 3.4051e-07 120

- magnet\_forearm\_y 1 3.4058e-07 120

- stddev\_yaw\_forearm 1 3.4060e-07 120

- accel\_belt\_x 1 3.4064e-07 120

- magnet\_belt\_y 1 3.4080e-07 120

- yaw\_forearm 1 3.4139e-07 120

- gyros\_arm\_x 1 3.4155e-07 120

- total\_accel\_forearm 1 3.4176e-07 120

- roll\_arm 1 3.4211e-07 120

- roll\_belt 1 3.4215e-07 120

- magnet\_arm\_z 1 3.4257e-07 120

- accel\_dumbbell\_y 1 3.4283e-07 120

- gyros\_belt\_z 1 3.4327e-07 120

- accel\_dumbbell\_z 1 3.4362e-07 120

- gyros\_arm\_y 1 3.4386e-07 120

- magnet\_arm\_x 1 3.4396e-07 120

- cvtd\_timestamp 1 3.4405e-07 120

- gyros\_arm\_z 1 3.4429e-07 120

- yaw\_dumbbell 1 3.4444e-07 120

- user\_name 1 3.4550e-07 120

- accel\_belt\_y 1 3.4561e-07 120

- magnet\_dumbbell\_x 1 3.4615e-07 120

- pitch\_belt 1 3.4752e-07 120

- total\_accel\_belt 1 3.4768e-07 120

- accel\_forearm\_z 1 3.4792e-07 120

- accel\_forearm\_x 1 3.4803e-07 120

- accel\_forearm\_y 1 3.4810e-07 120

- magnet\_belt\_x 1 3.4819e-07 120

- accel\_arm\_x 1 3.4864e-07 120

- roll\_dumbbell 1 3.4882e-07 120

- gyros\_forearm\_y 1 3.4913e-07 120

- raw\_timestamp\_part\_2 1 3.4914e-07 120

- gyros\_belt\_y 1 3.4936e-07 120

- accel\_dumbbell\_x 1 3.4954e-07 120

- pitch\_forearm 1 3.4969e-07 120

- pitch\_dumbbell 1 3.5115e-07 120

- total\_accel\_dumbbell 1 3.5120e-07 120

- raw\_timestamp\_part\_1 1 3.5252e-07 120

- gyros\_forearm\_z 1 3.5714e-07 120

- magnet\_belt\_z 1 3.5896e-07 120

- accel\_arm\_z 1 3.6038e-07 120

- magnet\_forearm\_x 1 3.6249e-07 120

- magnet\_forearm\_z 1 3.7278e-07 120

- magnet\_arm\_y 1 3.8951e-07 120

- accel\_arm\_y 1 4.0411e-07 120

- pitch\_arm 1 4.2032e-07 120

- num\_window 1 1.5840e-06 120

<none> 3.3882e-07 122

Step: AIC=120

classe ~ user\_name + raw\_timestamp\_part\_1 + raw\_timestamp\_part\_2 +

cvtd\_timestamp + num\_window + roll\_belt + pitch\_belt + total\_accel\_belt +

gyros\_belt\_y + gyros\_belt\_z + accel\_belt\_x + accel\_belt\_y +

accel\_belt\_z + magnet\_belt\_x + magnet\_belt\_y + magnet\_belt\_z +

roll\_arm + pitch\_arm + total\_accel\_arm + gyros\_arm\_x + gyros\_arm\_y +

gyros\_arm\_z + accel\_arm\_x + accel\_arm\_y + accel\_arm\_z + magnet\_arm\_x +

magnet\_arm\_y + magnet\_arm\_z + kurtosis\_roll\_arm + max\_roll\_arm +

max\_yaw\_arm + min\_roll\_arm + min\_yaw\_arm + roll\_dumbbell +

pitch\_dumbbell + yaw\_dumbbell + min\_pitch\_dumbbell + total\_accel\_dumbbell

+

gyros\_dumbbell\_z + accel\_dumbbell\_x + accel\_dumbbell\_y +

accel\_dumbbell\_z + magnet\_dumbbell\_x + pitch\_forearm + yaw\_forearm +

skewness\_pitch\_forearm + min\_pitch\_forearm + total\_accel\_forearm +

stddev\_yaw\_forearm + var\_yaw\_forearm + gyros\_forearm\_x +

gyros\_forearm\_y + gyros\_forearm\_z + accel\_forearm\_x + accel\_forearm\_y +

accel\_forearm\_z + magnet\_forearm\_x + magnet\_forearm\_y + magnet\_forearm\_z

Df Deviance AIC

- kurtosis\_roll\_arm 1 3.3913e-07 118

- skewness\_pitch\_forearm 1 3.3930e-07 118

- min\_yaw\_arm 1 3.3956e-07 118

- accel\_belt\_z 1 3.3963e-07 118

- max\_yaw\_arm 1 3.3983e-07 118

- gyros\_forearm\_x 1 3.4008e-07 118

- min\_pitch\_forearm 1 3.4012e-07 118

- min\_roll\_arm 1 3.4041e-07 118

- max\_roll\_arm 1 3.4052e-07 118

- min\_pitch\_dumbbell 1 3.4054e-07 118

- gyros\_dumbbell\_z 1 3.4057e-07 118

- magnet\_forearm\_y 1 3.4059e-07 118

- var\_yaw\_forearm 1 3.4060e-07 118

- total\_accel\_arm 1 3.4064e-07 118

- stddev\_yaw\_forearm 1 3.4065e-07 118

- accel\_belt\_x 1 3.4067e-07 118

- magnet\_belt\_y 1 3.4086e-07 118

- yaw\_forearm 1 3.4154e-07 118

- total\_accel\_forearm 1 3.4175e-07 118

- gyros\_arm\_x 1 3.4191e-07 118

- roll\_belt 1 3.4223e-07 118

- roll\_arm 1 3.4227e-07 118

- magnet\_arm\_z 1 3.4267e-07 118

- accel\_dumbbell\_y 1 3.4275e-07 118

- accel\_dumbbell\_z 1 3.4352e-07 118

- gyros\_belt\_z 1 3.4358e-07 118

- gyros\_arm\_y 1 3.4430e-07 118

- cvtd\_timestamp 1 3.4432e-07 118

- magnet\_arm\_x 1 3.4433e-07 118

- yaw\_dumbbell 1 3.4436e-07 118

- gyros\_arm\_z 1 3.4447e-07 118

- user\_name 1 3.4564e-07 118

- accel\_belt\_y 1 3.4577e-07 118

- magnet\_dumbbell\_x 1 3.4620e-07 118

- pitch\_belt 1 3.4762e-07 118

- total\_accel\_belt 1 3.4782e-07 118

- accel\_forearm\_x 1 3.4808e-07 118

- accel\_forearm\_z 1 3.4812e-07 118

- accel\_forearm\_y 1 3.4812e-07 118

- magnet\_belt\_x 1 3.4836e-07 118

- accel\_arm\_x 1 3.4872e-07 118

- roll\_dumbbell 1 3.4876e-07 118

- raw\_timestamp\_part\_2 1 3.4912e-07 118

- gyros\_forearm\_y 1 3.4924e-07 118

- gyros\_belt\_y 1 3.4955e-07 118

- accel\_dumbbell\_x 1 3.4965e-07 118

- pitch\_forearm 1 3.4990e-07 118

- pitch\_dumbbell 1 3.5114e-07 118

- total\_accel\_dumbbell 1 3.5139e-07 118

- raw\_timestamp\_part\_1 1 3.5268e-07 118

- gyros\_forearm\_z 1 3.5713e-07 118

- magnet\_belt\_z 1 3.5893e-07 118

- accel\_arm\_z 1 3.6042e-07 118

- magnet\_forearm\_x 1 3.6264e-07 118

- magnet\_forearm\_z 1 3.7323e-07 118

- magnet\_arm\_y 1 3.8974e-07 118

- accel\_arm\_y 1 4.0431e-07 118

- pitch\_arm 1 4.2038e-07 118

- num\_window 1 1.5846e-06 118

<none> 3.3885e-07 120

Step: AIC=118

classe ~ user\_name + raw\_timestamp\_part\_1 + raw\_timestamp\_part\_2 +

cvtd\_timestamp + num\_window + roll\_belt + pitch\_belt + total\_accel\_belt +

gyros\_belt\_y + gyros\_belt\_z + accel\_belt\_x + accel\_belt\_y +

accel\_belt\_z + magnet\_belt\_x + magnet\_belt\_y + magnet\_belt\_z +

roll\_arm + pitch\_arm + total\_accel\_arm + gyros\_arm\_x + gyros\_arm\_y +

gyros\_arm\_z + accel\_arm\_x + accel\_arm\_y + accel\_arm\_z + magnet\_arm\_x +

magnet\_arm\_y + magnet\_arm\_z + max\_roll\_arm + max\_yaw\_arm +

min\_roll\_arm + min\_yaw\_arm + roll\_dumbbell + pitch\_dumbbell +

yaw\_dumbbell + min\_pitch\_dumbbell + total\_accel\_dumbbell +

gyros\_dumbbell\_z + accel\_dumbbell\_x + accel\_dumbbell\_y +

accel\_dumbbell\_z + magnet\_dumbbell\_x + pitch\_forearm + yaw\_forearm +

skewness\_pitch\_forearm + min\_pitch\_forearm + total\_accel\_forearm +

stddev\_yaw\_forearm + var\_yaw\_forearm + gyros\_forearm\_x +

gyros\_forearm\_y + gyros\_forearm\_z + accel\_forearm\_x + accel\_forearm\_y +

accel\_forearm\_z + magnet\_forearm\_x + magnet\_forearm\_y + magnet\_forearm\_z

- accel\_arm\_z 1 3.6042e-07 118

- magnet\_forearm\_x 1 3.6264e-07 118

- magnet\_forearm\_z 1 3.7323e-07 118

- magnet\_arm\_y 1 3.8974e-07 118

- accel\_arm\_y 1 4.0431e-07 118

- pitch\_arm 1 4.2038e-07 118

- num\_window 1 1.5846e-06 118

<none> 3.3885e-07 120

Step: AIC=118

classe ~ user\_name + raw\_timestamp\_part\_1 + raw\_timestamp\_part\_2 +

cvtd\_timestamp + num\_window + roll\_belt + pitch\_belt + total\_accel\_belt +

gyros\_belt\_y + gyros\_belt\_z + accel\_belt\_x + accel\_belt\_y +

accel\_belt\_z + magnet\_belt\_x + magnet\_belt\_y + magnet\_belt\_z +

roll\_arm + pitch\_arm + total\_accel\_arm + gyros\_arm\_x + gyros\_arm\_y +

gyros\_arm\_z + accel\_arm\_x + accel\_arm\_y + accel\_arm\_z + magnet\_arm\_x +

magnet\_arm\_y + magnet\_arm\_z + max\_roll\_arm + max\_yaw\_arm +

min\_roll\_arm + min\_yaw\_arm + roll\_dumbbell + pitch\_dumbbell +

yaw\_dumbbell + min\_pitch\_dumbbell + total\_accel\_dumbbell +

gyros\_dumbbell\_z + accel\_dumbbell\_x + accel\_dumbbell\_y +

accel\_dumbbell\_z + magnet\_dumbbell\_x + pitch\_forearm + yaw\_forearm +

skewness\_pitch\_forearm + min\_pitch\_forearm + total\_accel\_forearm +

stddev\_yaw\_forearm + var\_yaw\_forearm + gyros\_forearm\_x +

gyros\_forearm\_y + gyros\_forearm\_z + accel\_forearm\_x + accel\_forearm\_y +

accel\_forearm\_z + magnet\_forearm\_x + magnet\_forearm\_y + magnet\_forearm\_z

Df Deviance AIC

- skewness\_pitch\_forearm 1 3.3950e-07 116

- min\_yaw\_arm 1 3.3963e-07 116

- accel\_belt\_z 1 3.3988e-07 116

- max\_yaw\_arm 1 3.3993e-07 116

- min\_pitch\_forearm 1 3.4025e-07 116

- gyros\_forearm\_x 1 3.4031e-07 116

- min\_roll\_arm 1 3.4047e-07 116

- max\_roll\_arm 1 3.4053e-07 116

- min\_pitch\_dumbbell 1 3.4059e-07 116

- stddev\_yaw\_forearm 1 3.4087e-07 116

- magnet\_forearm\_y 1 3.4088e-07 116

- total\_accel\_arm 1 3.4088e-07 116

- var\_yaw\_forearm 1 3.4090e-07 116

- gyros\_dumbbell\_z 1 3.4092e-07 116

- accel\_belt\_x 1 3.4103e-07 116

- magnet\_belt\_y 1 3.4123e-07 116

- yaw\_forearm 1 3.4181e-07 116

- total\_accel\_forearm 1 3.4209e-07 116

- gyros\_arm\_x 1 3.4222e-07 116

- roll\_belt 1 3.4268e-07 116

- roll\_arm 1 3.4275e-07 116

- accel\_dumbbell\_y 1 3.4299e-07 116

- magnet\_arm\_z 1 3.4305e-07 116

- gyros\_belt\_z 1 3.4367e-07 116

- accel\_dumbbell\_z 1 3.4386e-07 116

- cvtd\_timestamp 1 3.4449e-07 116

- yaw\_dumbbell 1 3.4449e-07 116

- gyros\_arm\_y 1 3.4453e-07 116

- gyros\_arm\_z 1 3.4485e-07 116

- magnet\_arm\_x 1 3.4490e-07 116

- user\_name 1 3.4591e-07 116

- accel\_belt\_y 1 3.4601e-07 116

- magnet\_dumbbell\_x 1 3.4656e-07 116

- total\_accel\_belt 1 3.4799e-07 116

- pitch\_belt 1 3.4800e-07 116

- accel\_forearm\_z 1 3.4832e-07 116

- accel\_forearm\_y 1 3.4856e-07 116

- accel\_forearm\_x 1 3.4863e-07 116

- magnet\_belt\_x 1 3.4869e-07 116

- roll\_dumbbell 1 3.4884e-07 116

- accel\_arm\_x 1 3.4885e-07 116

- raw\_timestamp\_part\_2 1 3.4933e-07 116

- gyros\_forearm\_y 1 3.4948e-07 116

- accel\_dumbbell\_x 1 3.4997e-07 116

- gyros\_belt\_y 1 3.4997e-07 116

- pitch\_forearm 1 3.5035e-07 116

- pitch\_dumbbell 1 3.5158e-07 116

- total\_accel\_dumbbell 1 3.5191e-07 116

- raw\_timestamp\_part\_1 1 3.5311e-07 116

- gyros\_forearm\_z 1 3.5752e-07 116

- magnet\_belt\_z 1 3.5922e-07 116

- accel\_arm\_z 1 3.6095e-07 116

- magnet\_forearm\_x 1 3.6297e-07 116

- magnet\_forearm\_z 1 3.7311e-07 116

- magnet\_arm\_y 1 3.9015e-07 116

- accel\_arm\_y 1 4.0489e-07 116

- pitch\_arm 1 4.2071e-07 116

- num\_window 1 1.5841e-06 116

<none> 3.3913e-07 118

Step: AIC=116

classe ~ user\_name + raw\_timestamp\_part\_1 + raw\_timestamp\_part\_2 +

cvtd\_timestamp + num\_window + roll\_belt + pitch\_belt + total\_accel\_belt +

gyros\_belt\_y + gyros\_belt\_z + accel\_belt\_x + accel\_belt\_y +

accel\_belt\_z + magnet\_belt\_x + magnet\_belt\_y + magnet\_belt\_z +

roll\_arm + pitch\_arm + total\_accel\_arm + gyros\_arm\_x + gyros\_arm\_y +

gyros\_arm\_z + accel\_arm\_x + accel\_arm\_y + accel\_arm\_z + magnet\_arm\_x +

magnet\_arm\_y + magnet\_arm\_z + max\_roll\_arm + max\_yaw\_arm +

min\_roll\_arm + min\_yaw\_arm + roll\_dumbbell + pitch\_dumbbell +

yaw\_dumbbell + min\_pitch\_dumbbell + total\_accel\_dumbbell +

gyros\_dumbbell\_z + accel\_dumbbell\_x + accel\_dumbbell\_y +

accel\_dumbbell\_z + magnet\_dumbbell\_x + pitch\_forearm + yaw\_forearm +

min\_pitch\_forearm + total\_accel\_forearm + stddev\_yaw\_forearm +

var\_yaw\_forearm + gyros\_forearm\_x + gyros\_forearm\_y + gyros\_forearm\_z +

accel\_forearm\_x + accel\_forearm\_y + accel\_forearm\_z + magnet\_forearm\_x +

magnet\_forearm\_y + magnet\_forearm\_z

Df Deviance AIC

- min\_yaw\_arm 1 3.3972e-07 114

- accel\_belt\_z 1 3.4012e-07 114

- max\_yaw\_arm 1 3.4017e-07 114

- min\_pitch\_forearm 1 3.4042e-07 114

- max\_roll\_arm 1 3.4063e-07 114

- min\_roll\_arm 1 3.4068e-07 114

- gyros\_forearm\_x 1 3.4070e-07 114

- min\_pitch\_dumbbell 1 3.4073e-07 114

- total\_accel\_arm 1 3.4093e-07 114

- gyros\_dumbbell\_z 1 3.4096e-07 114

- stddev\_yaw\_forearm 1 3.4104e-07 114

- magnet\_forearm\_y 1 3.4126e-07 114

- var\_yaw\_forearm 1 3.4127e-07 114

- accel\_belt\_x 1 3.4128e-07 114

- magnet\_belt\_y 1 3.4134e-07 114

- yaw\_forearm 1 3.4217e-07 114

- total\_accel\_forearm 1 3.4239e-07 114

- gyros\_arm\_x 1 3.4240e-07 114

- roll\_arm 1 3.4289e-07 114

- roll\_belt 1 3.4292e-07 114

- magnet\_arm\_z 1 3.4310e-07 114

- accel\_dumbbell\_y 1 3.4310e-07 114

- gyros\_belt\_z 1 3.4388e-07 114

- accel\_dumbbell\_z 1 3.4408e-07 114

- cvtd\_timestamp 1 3.4451e-07 114

- gyros\_arm\_y 1 3.4463e-07 114

- yaw\_dumbbell 1 3.4476e-07 114

- magnet\_arm\_x 1 3.4488e-07 114

- gyros\_arm\_z 1 3.4495e-07 114

- user\_name 1 3.4600e-07 114

- accel\_belt\_y 1 3.4607e-07 114

- magnet\_dumbbell\_x 1 3.4694e-07 114

- pitch\_belt 1 3.4806e-07 114

- total\_accel\_belt 1 3.4841e-07 114

- accel\_forearm\_z 1 3.4842e-07 114

- accel\_forearm\_y 1 3.4867e-07 114

- magnet\_belt\_x 1 3.4878e-07 114

- accel\_forearm\_x 1 3.4889e-07 114

- accel\_arm\_x 1 3.4904e-07 114

- roll\_dumbbell 1 3.4908e-07 114

- gyros\_forearm\_y 1 3.4949e-07 114

- raw\_timestamp\_part\_2 1 3.4968e-07 114

- accel\_dumbbell\_x 1 3.4998e-07 114

- gyros\_belt\_y 1 3.5025e-07 114

- pitch\_forearm 1 3.5051e-07 114

- pitch\_dumbbell 1 3.5165e-07 114

- total\_accel\_dumbbell 1 3.5199e-07 114

- raw\_timestamp\_part\_1 1 3.5317e-07 114

- gyros\_forearm\_z 1 3.5751e-07 114

- magnet\_belt\_z 1 3.5954e-07 114

- accel\_arm\_z 1 3.6108e-07 114

- magnet\_forearm\_x 1 3.6299e-07 114

- magnet\_forearm\_z 1 3.7314e-07 114

- magnet\_arm\_y 1 3.9085e-07 114

- accel\_arm\_y 1 4.0496e-07 114

- pitch\_arm 1 4.2069e-07 114

- num\_window 1 1.5862e-06 114

<none> 3.3950e-07 116

Step: AIC=114

classe ~ user\_name + raw\_timestamp\_part\_1 + raw\_timestamp\_part\_2 +

cvtd\_timestamp + num\_window + roll\_belt + pitch\_belt + total\_accel\_belt +

gyros\_belt\_y + gyros\_belt\_z + accel\_belt\_x + accel\_belt\_y +

accel\_belt\_z + magnet\_belt\_x + magnet\_belt\_y + magnet\_belt\_z +

roll\_arm + pitch\_arm + total\_accel\_arm + gyros\_arm\_x + gyros\_arm\_y +

gyros\_arm\_z + accel\_arm\_x + accel\_arm\_y + accel\_arm\_z + magnet\_arm\_x +

magnet\_arm\_y + magnet\_arm\_z + max\_roll\_arm + max\_yaw\_arm +

min\_roll\_arm + roll\_dumbbell + pitch\_dumbbell + yaw\_dumbbell +

min\_pitch\_dumbbell + total\_accel\_dumbbell + gyros\_dumbbell\_z +

accel\_dumbbell\_x + accel\_dumbbell\_y + accel\_dumbbell\_z +

magnet\_dumbbell\_x + pitch\_forearm + yaw\_forearm + min\_pitch\_forearm +

total\_accel\_forearm + stddev\_yaw\_forearm + var\_yaw\_forearm +

gyros\_forearm\_x + gyros\_forearm\_y + gyros\_forearm\_z + accel\_forearm\_x +

accel\_forearm\_y + accel\_forearm\_z + magnet\_forearm\_x + magnet\_forearm\_y +

magnet\_forearm\_z

Df Deviance AIC

- max\_yaw\_arm 1 3.4041e-07 112

- accel\_belt\_z 1 3.4042e-07 112

- min\_roll\_arm 1 3.4063e-07 112

- min\_pitch\_forearm 1 3.4064e-07 112

- max\_roll\_arm 1 3.4084e-07 112

- min\_pitch\_dumbbell 1 3.4094e-07 112

- gyros\_forearm\_x 1 3.4100e-07 112

- stddev\_yaw\_forearm 1 3.4107e-07 112

- gyros\_dumbbell\_z 1 3.4128e-07 112

- total\_accel\_arm 1 3.4128e-07 112

- var\_yaw\_forearm 1 3.4139e-07 112

- magnet\_forearm\_y 1 3.4148e-07 112

- accel\_belt\_x 1 3.4152e-07 112

- magnet\_belt\_y 1 3.4160e-07 112

- yaw\_forearm 1 3.4237e-07 112

- gyros\_arm\_x 1 3.4265e-07 112

- total\_accel\_forearm 1 3.4271e-07 112

- roll\_belt 1 3.4310e-07 112

- roll\_arm 1 3.4322e-07 112

- magnet\_arm\_z 1 3.4332e-07 112

- accel\_dumbbell\_y 1 3.4336e-07 112

- gyros\_belt\_z 1 3.4408e-07 112

- accel\_dumbbell\_z 1 3.4438e-07 112

- cvtd\_timestamp 1 3.4487e-07 112

- gyros\_arm\_y 1 3.4492e-07 112

- yaw\_dumbbell 1 3.4503e-07 112

- magnet\_arm\_x 1 3.4507e-07 112

- gyros\_arm\_z 1 3.4525e-07 112

- user\_name 1 3.4611e-07 112

- accel\_belt\_y 1 3.4652e-07 112

- magnet\_dumbbell\_x 1 3.4714e-07 112

- pitch\_belt 1 3.4820e-07 112

- total\_accel\_belt 1 3.4854e-07 112

- accel\_forearm\_z 1 3.4873e-07 112

- accel\_forearm\_y 1 3.4910e-07 112

- accel\_forearm\_x 1 3.4911e-07 112

- magnet\_belt\_x 1 3.4914e-07 112

- roll\_dumbbell 1 3.4921e-07 112

- accel\_arm\_x 1 3.4946e-07 112

- raw\_timestamp\_part\_2 1 3.4970e-07 112

- gyros\_forearm\_y 1 3.4976e-07 112

- accel\_dumbbell\_x 1 3.5024e-07 112

- pitch\_forearm 1 3.5071e-07 112

- gyros\_belt\_y 1 3.5077e-07 112

- total\_accel\_dumbbell 1 3.5232e-07 112

- pitch\_dumbbell 1 3.5242e-07 112

- raw\_timestamp\_part\_1 1 3.5329e-07 112

- gyros\_forearm\_z 1 3.5803e-07 112

- magnet\_belt\_z 1 3.5985e-07 112

- accel\_arm\_z 1 3.6112e-07 112

- magnet\_forearm\_x 1 3.6306e-07 112

- magnet\_forearm\_z 1 3.7350e-07 112

- magnet\_arm\_y 1 3.9055e-07 112

- accel\_arm\_y 1 4.0529e-07 112

- pitch\_arm 1 4.2151e-07 112

- num\_window 1 1.5882e-06 112

<none> 3.3972e-07 114

Step: AIC=112

classe ~ user\_name + raw\_timestamp\_part\_1 + raw\_timestamp\_part\_2 +

cvtd\_timestamp + num\_window + roll\_belt + pitch\_belt + total\_accel\_belt +

gyros\_belt\_y + gyros\_belt\_z + accel\_belt\_x + accel\_belt\_y +

accel\_belt\_z + magnet\_belt\_x + magnet\_belt\_y + magnet\_belt\_z +

roll\_arm + pitch\_arm + total\_accel\_arm + gyros\_arm\_x + gyros\_arm\_y +

gyros\_arm\_z + accel\_arm\_x + accel\_arm\_y + accel\_arm\_z + magnet\_arm\_x +

magnet\_arm\_y + magnet\_arm\_z + max\_roll\_arm + min\_roll\_arm +

roll\_dumbbell + pitch\_dumbbell + yaw\_dumbbell + min\_pitch\_dumbbell +

total\_accel\_dumbbell + gyros\_dumbbell\_z + accel\_dumbbell\_x +

accel\_dumbbell\_y + accel\_dumbbell\_z + magnet\_dumbbell\_x +

pitch\_forearm + yaw\_forearm + min\_pitch\_forearm + total\_accel\_forearm +

stddev\_yaw\_forearm + var\_yaw\_forearm + gyros\_forearm\_x +

gyros\_forearm\_y + gyros\_forearm\_z + accel\_forearm\_x + accel\_forearm\_y +

accel\_forearm\_z + magnet\_forearm\_x + magnet\_forearm\_y + magnet\_forearm\_z

Df Deviance AIC

- min\_roll\_arm 1 3.4066e-07 110

- accel\_belt\_z 1 3.4078e-07 110

- max\_roll\_arm 1 3.4096e-07 110

- min\_pitch\_forearm 1 3.4100e-07 110

- min\_pitch\_dumbbell 1 3.4121e-07 110

- gyros\_forearm\_x 1 3.4167e-07 110

- stddev\_yaw\_forearm 1 3.4167e-07 110

- var\_yaw\_forearm 1 3.4201e-07 110

- total\_accel\_arm 1 3.4201e-07 110

- magnet\_forearm\_y 1 3.4204e-07 110

- magnet\_belt\_y 1 3.4224e-07 110

- gyros\_dumbbell\_z 1 3.4234e-07 110

- accel\_belt\_x 1 3.4238e-07 110

- yaw\_forearm 1 3.4302e-07 110

- total\_accel\_forearm 1 3.4324e-07 110

- gyros\_arm\_x 1 3.4374e-07 110

- roll\_arm 1 3.4409e-07 110

- roll\_belt 1 3.4411e-07 110

- magnet\_arm\_z 1 3.4432e-07 110

- accel\_dumbbell\_y 1 3.4446e-07 110

- gyros\_belt\_z 1 3.4495e-07 110

- accel\_dumbbell\_z 1 3.4521e-07 110

- cvtd\_timestamp 1 3.4557e-07 110

- yaw\_dumbbell 1 3.4575e-07 110

- gyros\_arm\_z 1 3.4583e-07 110

- gyros\_arm\_y 1 3.4611e-07 110

- magnet\_arm\_x 1 3.4622e-07 110

- user\_name 1 3.4722e-07 110

- accel\_belt\_y 1 3.4756e-07 110

- magnet\_dumbbell\_x 1 3.4802e-07 110

- pitch\_belt 1 3.4920e-07 110

- accel\_forearm\_z 1 3.4934e-07 110

- total\_accel\_belt 1 3.4963e-07 110

- accel\_arm\_x 1 3.4967e-07 110

- accel\_forearm\_y 1 3.4982e-07 110

- magnet\_belt\_x 1 3.4988e-07 110

- roll\_dumbbell 1 3.4994e-07 110

- accel\_forearm\_x 1 3.5040e-07 110

- raw\_timestamp\_part\_2 1 3.5053e-07 110

- accel\_dumbbell\_x 1 3.5080e-07 110

- gyros\_forearm\_y 1 3.5081e-07 110

- gyros\_belt\_y 1 3.5132e-07 110

- pitch\_forearm 1 3.5169e-07 110

- pitch\_dumbbell 1 3.5313e-07 110

- total\_accel\_dumbbell 1 3.5315e-07 110

- raw\_timestamp\_part\_1 1 3.5397e-07 110

- gyros\_forearm\_z 1 3.5862e-07 110

- magnet\_belt\_z 1 3.6030e-07 110

- accel\_arm\_z 1 3.6172e-07 110

- magnet\_forearm\_x 1 3.6448e-07 110

- magnet\_forearm\_z 1 3.7410e-07 110

- magnet\_arm\_y 1 3.9092e-07 110

- accel\_arm\_y 1 4.0517e-07 110

- pitch\_arm 1 4.2176e-07 110

- num\_window 1 1.5976e-06 110

<none> 3.4041e-07 112

Step: AIC=110

classe ~ user\_name + raw\_timestamp\_part\_1 + raw\_timestamp\_part\_2 +

cvtd\_timestamp + num\_window + roll\_belt + pitch\_belt + total\_accel\_belt +

gyros\_belt\_y + gyros\_belt\_z + accel\_belt\_x + accel\_belt\_y +

accel\_belt\_z + magnet\_belt\_x + magnet\_belt\_y + magnet\_belt\_z +

roll\_arm + pitch\_arm + total\_accel\_arm + gyros\_arm\_x + gyros\_arm\_y +

gyros\_arm\_z + accel\_arm\_x + accel\_arm\_y + accel\_arm\_z + magnet\_arm\_x +

magnet\_arm\_y + magnet\_arm\_z + max\_roll\_arm + roll\_dumbbell +

pitch\_dumbbell + yaw\_dumbbell + min\_pitch\_dumbbell + total\_accel\_dumbbell

+

gyros\_dumbbell\_z + accel\_dumbbell\_x + accel\_dumbbell\_y +

accel\_dumbbell\_z + magnet\_dumbbell\_x + pitch\_forearm + yaw\_forearm +

min\_pitch\_forearm + total\_accel\_forearm + stddev\_yaw\_forearm +

var\_yaw\_forearm + gyros\_forearm\_x + gyros\_forearm\_y + gyros\_forearm\_z +

accel\_forearm\_x + accel\_forearm\_y + accel\_forearm\_z + magnet\_forearm\_x +

magnet\_forearm\_y + magnet\_forearm\_z

Df Deviance AIC

- min\_pitch\_forearm 1 3.4108e-07 108

- accel\_belt\_z 1 3.4121e-07 108

- min\_pitch\_dumbbell 1 3.4127e-07 108

- max\_roll\_arm 1 3.4137e-07 108

- gyros\_forearm\_x 1 3.4174e-07 108

- stddev\_yaw\_forearm 1 3.4191e-07 108

- var\_yaw\_forearm 1 3.4213e-07 108

- total\_accel\_arm 1 3.4231e-07 108

- magnet\_forearm\_y 1 3.4238e-07 108

- magnet\_belt\_y 1 3.4246e-07 108

- accel\_belt\_x 1 3.4248e-07 108

- gyros\_dumbbell\_z 1 3.4263e-07 108

- yaw\_forearm 1 3.4335e-07 108

- total\_accel\_forearm 1 3.4348e-07 108

- gyros\_arm\_x 1 3.4397e-07 108

- roll\_arm 1 3.4435e-07 108

- magnet\_arm\_z 1 3.4445e-07 108

- roll\_belt 1 3.4445e-07 108

- accel\_dumbbell\_y 1 3.4464e-07 108

- gyros\_belt\_z 1 3.4494e-07 108

- accel\_dumbbell\_z 1 3.4557e-07 108

- cvtd\_timestamp 1 3.4589e-07 108

- gyros\_arm\_y 1 3.4605e-07 108

- yaw\_dumbbell 1 3.4608e-07 108

- magnet\_arm\_x 1 3.4620e-07 108

- gyros\_arm\_z 1 3.4656e-07 108

- user\_name 1 3.4733e-07 108

- accel\_belt\_y 1 3.4760e-07 108

- magnet\_dumbbell\_x 1 3.4840e-07 108

- pitch\_belt 1 3.4931e-07 108

- accel\_forearm\_z 1 3.4957e-07 108

- total\_accel\_belt 1 3.4972e-07 108

- accel\_arm\_x 1 3.4994e-07 108

- magnet\_belt\_x 1 3.4996e-07 108

- accel\_forearm\_y 1 3.5016e-07 108

- roll\_dumbbell 1 3.5027e-07 108

- accel\_forearm\_x 1 3.5047e-07 108

- raw\_timestamp\_part\_2 1 3.5109e-07 108

- gyros\_forearm\_y 1 3.5117e-07 108

- accel\_dumbbell\_x 1 3.5145e-07 108

- gyros\_belt\_y 1 3.5147e-07 108

- pitch\_forearm 1 3.5185e-07 108

- pitch\_dumbbell 1 3.5331e-07 108

- total\_accel\_dumbbell 1 3.5359e-07 108

- raw\_timestamp\_part\_1 1 3.5399e-07 108

- gyros\_forearm\_z 1 3.5899e-07 108

- magnet\_belt\_z 1 3.6102e-07 108

- accel\_arm\_z 1 3.6228e-07 108

- magnet\_forearm\_x 1 3.6450e-07 108

- magnet\_forearm\_z 1 3.7451e-07 108

- magnet\_arm\_y 1 3.9098e-07 108

- accel\_arm\_y 1 4.0516e-07 108

- pitch\_arm 1 4.2195e-07 108

- num\_window 1 1.5941e-06 108

<none> 3.4066e-07 110

Step: AIC=108

classe ~ user\_name + raw\_timestamp\_part\_1 + raw\_timestamp\_part\_2 +

cvtd\_timestamp + num\_window + roll\_belt + pitch\_belt + total\_accel\_belt +

gyros\_belt\_y + gyros\_belt\_z + accel\_belt\_x + accel\_belt\_y +

accel\_belt\_z + magnet\_belt\_x + magnet\_belt\_y + magnet\_belt\_z +

roll\_arm + pitch\_arm + total\_accel\_arm + gyros\_arm\_x + gyros\_arm\_y +

gyros\_arm\_z + accel\_arm\_x + accel\_arm\_y + accel\_arm\_z + magnet\_arm\_x +

magnet\_arm\_y + magnet\_arm\_z + max\_roll\_arm + roll\_dumbbell +

pitch\_dumbbell + yaw\_dumbbell + min\_pitch\_dumbbell + total\_accel\_dumbbell

+

gyros\_dumbbell\_z + accel\_dumbbell\_x + accel\_dumbbell\_y +

accel\_dumbbell\_z + magnet\_dumbbell\_x + pitch\_forearm + yaw\_forearm +

total\_accel\_forearm + stddev\_yaw\_forearm + var\_yaw\_forearm +

gyros\_forearm\_x + gyros\_forearm\_y + gyros\_forearm\_z + accel\_forearm\_x +

accel\_forearm\_y + accel\_forearm\_z + magnet\_forearm\_x + magnet\_forearm\_y +

magnet\_forearm\_z

Df Deviance AIC

- min\_pitch\_dumbbell 1 3.4130e-07 106

- max\_roll\_arm 1 3.4145e-07 106

- accel\_belt\_z 1 3.4164e-07 106

- stddev\_yaw\_forearm 1 3.4202e-07 106

- gyros\_forearm\_x 1 3.4212e-07 106

- var\_yaw\_forearm 1 3.4229e-07 106

- total\_accel\_arm 1 3.4276e-07 106

- magnet\_forearm\_y 1 3.4281e-07 106

- accel\_belt\_x 1 3.4287e-07 106

- magnet\_belt\_y 1 3.4289e-07 106

- gyros\_dumbbell\_z 1 3.4303e-07 106

- yaw\_forearm 1 3.4365e-07 106

- total\_accel\_forearm 1 3.4386e-07 106

- gyros\_arm\_x 1 3.4427e-07 106

- roll\_belt 1 3.4474e-07 106

- magnet\_arm\_z 1 3.4487e-07 106

- roll\_arm 1 3.4488e-07 106

- accel\_dumbbell\_y 1 3.4508e-07 106

- gyros\_belt\_z 1 3.4512e-07 106

- accel\_dumbbell\_z 1 3.4593e-07 106

- cvtd\_timestamp 1 3.4629e-07 106

- magnet\_arm\_x 1 3.4639e-07 106

- yaw\_dumbbell 1 3.4643e-07 106

- gyros\_arm\_y 1 3.4646e-07 106

- gyros\_arm\_z 1 3.4681e-07 106

- user\_name 1 3.4769e-07 106

- accel\_belt\_y 1 3.4795e-07 106

- magnet\_dumbbell\_x 1 3.4847e-07 106

- pitch\_belt 1 3.4954e-07 106

- accel\_forearm\_z 1 3.4997e-07 106

- total\_accel\_belt 1 3.5013e-07 106

- magnet\_belt\_x 1 3.5014e-07 106

- accel\_forearm\_y 1 3.5020e-07 106

- accel\_forearm\_x 1 3.5050e-07 106

- roll\_dumbbell 1 3.5063e-07 106

- accel\_arm\_x 1 3.5079e-07 106

- raw\_timestamp\_part\_2 1 3.5111e-07 106

- gyros\_forearm\_y 1 3.5129e-07 106

- gyros\_belt\_y 1 3.5161e-07 106

- accel\_dumbbell\_x 1 3.5162e-07 106

- pitch\_forearm 1 3.5208e-07 106

- pitch\_dumbbell 1 3.5342e-07 106

- total\_accel\_dumbbell 1 3.5357e-07 106

- raw\_timestamp\_part\_1 1 3.5435e-07 106

- gyros\_forearm\_z 1 3.5908e-07 106

- magnet\_belt\_z 1 3.6109e-07 106

- accel\_arm\_z 1 3.6270e-07 106

- magnet\_forearm\_x 1 3.6478e-07 106

- magnet\_forearm\_z 1 3.7480e-07 106

- magnet\_arm\_y 1 3.9160e-07 106

- accel\_arm\_y 1 4.0614e-07 106

- pitch\_arm 1 4.2221e-07 106

- num\_window 1 1.5922e-06 106

<none> 3.4108e-07 108

Step: AIC=106

classe ~ user\_name + raw\_timestamp\_part\_1 + raw\_timestamp\_part\_2 +

cvtd\_timestamp + num\_window + roll\_belt + pitch\_belt + total\_accel\_belt +

gyros\_belt\_y + gyros\_belt\_z + accel\_belt\_x + accel\_belt\_y +

accel\_belt\_z + magnet\_belt\_x + magnet\_belt\_y + magnet\_belt\_z +

roll\_arm + pitch\_arm + total\_accel\_arm + gyros\_arm\_x + gyros\_arm\_y +

gyros\_arm\_z + accel\_arm\_x + accel\_arm\_y + accel\_arm\_z + magnet\_arm\_x +

magnet\_arm\_y + magnet\_arm\_z + max\_roll\_arm + roll\_dumbbell +

pitch\_dumbbell + yaw\_dumbbell + total\_accel\_dumbbell + gyros\_dumbbell\_z +

accel\_dumbbell\_x + accel\_dumbbell\_y + accel\_dumbbell\_z +

magnet\_dumbbell\_x + pitch\_forearm + yaw\_forearm + total\_accel\_forearm +

stddev\_yaw\_forearm + var\_yaw\_forearm + gyros\_forearm\_x +

gyros\_forearm\_y + gyros\_forearm\_z + accel\_forearm\_x + accel\_forearm\_y +

accel\_forearm\_z + magnet\_forearm\_x + magnet\_forearm\_y + magnet\_forearm\_z

Df Deviance AIC

- max\_roll\_arm 1 3.4146e-07 104

- accel\_belt\_z 1 3.4184e-07 104

- stddev\_yaw\_forearm 1 3.4199e-07 104

- var\_yaw\_forearm 1 3.4217e-07 104

- gyros\_forearm\_x 1 3.4239e-07 104

- gyros\_dumbbell\_z 1 3.4303e-07 104

- accel\_belt\_x 1 3.4303e-07 104

- total\_accel\_arm 1 3.4306e-07 104

- magnet\_forearm\_y 1 3.4307e-07 104

- magnet\_belt\_y 1 3.4309e-07 104

- yaw\_forearm 1 3.4394e-07 104

- total\_accel\_forearm 1 3.4416e-07 104

- gyros\_arm\_x 1 3.4437e-07 104

- roll\_belt 1 3.4489e-07 104

- roll\_arm 1 3.4495e-07 104

- magnet\_arm\_z 1 3.4504e-07 104

- accel\_dumbbell\_y 1 3.4529e-07 104

- gyros\_belt\_z 1 3.4537e-07 104

- accel\_dumbbell\_z 1 3.4632e-07 104

- cvtd\_timestamp 1 3.4650e-07 104

- gyros\_arm\_y 1 3.4652e-07 104

- magnet\_arm\_x 1 3.4660e-07 104

- yaw\_dumbbell 1 3.4683e-07 104

- gyros\_arm\_z 1 3.4706e-07 104

- user\_name 1 3.4784e-07 104

- accel\_belt\_y 1 3.4808e-07 104

- magnet\_dumbbell\_x 1 3.4886e-07 104

- pitch\_belt 1 3.4974e-07 104

- accel\_forearm\_z 1 3.5025e-07 104

- total\_accel\_belt 1 3.5032e-07 104

- magnet\_belt\_x 1 3.5041e-07 104

- accel\_forearm\_x 1 3.5044e-07 104

- accel\_forearm\_y 1 3.5061e-07 104

- accel\_arm\_x 1 3.5090e-07 104

- roll\_dumbbell 1 3.5103e-07 104

- gyros\_forearm\_y 1 3.5156e-07 104

- raw\_timestamp\_part\_2 1 3.5161e-07 104

- gyros\_belt\_y 1 3.5192e-07 104

- accel\_dumbbell\_x 1 3.5205e-07 104

- pitch\_forearm 1 3.5252e-07 104

- pitch\_dumbbell 1 3.5383e-07 104

- total\_accel\_dumbbell 1 3.5401e-07 104

- raw\_timestamp\_part\_1 1 3.5449e-07 104

- gyros\_forearm\_z 1 3.5926e-07 104

- magnet\_belt\_z 1 3.6153e-07 104

- accel\_arm\_z 1 3.6296e-07 104

- magnet\_forearm\_x 1 3.6486e-07 104

- magnet\_forearm\_z 1 3.7535e-07 104

- magnet\_arm\_y 1 3.9169e-07 104

- accel\_arm\_y 1 4.0662e-07 104

- pitch\_arm 1 4.2245e-07 104

- num\_window 1 1.5950e-06 104

<none> 3.4130e-07 106

Step: AIC=104

classe ~ user\_name + raw\_timestamp\_part\_1 + raw\_timestamp\_part\_2 +

cvtd\_timestamp + num\_window + roll\_belt + pitch\_belt + total\_accel\_belt +

gyros\_belt\_y + gyros\_belt\_z + accel\_belt\_x + accel\_belt\_y +

accel\_belt\_z + magnet\_belt\_x + magnet\_belt\_y + magnet\_belt\_z +

roll\_arm + pitch\_arm + total\_accel\_arm + gyros\_arm\_x + gyros\_arm\_y +

gyros\_arm\_z + accel\_arm\_x + accel\_arm\_y + accel\_arm\_z + magnet\_arm\_x +

magnet\_arm\_y + magnet\_arm\_z + roll\_dumbbell + pitch\_dumbbell +

yaw\_dumbbell + total\_accel\_dumbbell + gyros\_dumbbell\_z +

accel\_dumbbell\_x + accel\_dumbbell\_y + accel\_dumbbell\_z +

magnet\_dumbbell\_x + pitch\_forearm + yaw\_forearm + total\_accel\_forearm +

stddev\_yaw\_forearm + var\_yaw\_forearm + gyros\_forearm\_x +

gyros\_forearm\_y + gyros\_forearm\_z + accel\_forearm\_x + accel\_forearm\_y +

accel\_forearm\_z + magnet\_forearm\_x + magnet\_forearm\_y + magnet\_forearm\_z

Df Deviance AIC

- stddev\_yaw\_forearm 1 3.4185e-07 102

- var\_yaw\_forearm 1 3.4204e-07 102

- accel\_belt\_z 1 3.4209e-07 102

- gyros\_forearm\_x 1 3.4237e-07 102

- gyros\_dumbbell\_z 1 3.4303e-07 102

- total\_accel\_arm 1 3.4308e-07 102

- accel\_belt\_x 1 3.4317e-07 102

- magnet\_belt\_y 1 3.4319e-07 102

- magnet\_forearm\_y 1 3.4330e-07 102

- yaw\_forearm 1 3.4397e-07 102

- total\_accel\_forearm 1 3.4419e-07 102

- gyros\_arm\_x 1 3.4472e-07 102

- roll\_belt 1 3.4490e-07 102

- roll\_arm 1 3.4498e-07 102

- accel\_dumbbell\_y 1 3.4525e-07 102

- magnet\_arm\_z 1 3.4533e-07 102

- gyros\_belt\_z 1 3.4549e-07 102

- accel\_dumbbell\_z 1 3.4630e-07 102

- cvtd\_timestamp 1 3.4663e-07 102

- magnet\_arm\_x 1 3.4681e-07 102

- gyros\_arm\_y 1 3.4681e-07 102

- yaw\_dumbbell 1 3.4693e-07 102

- gyros\_arm\_z 1 3.4702e-07 102

- accel\_belt\_y 1 3.4794e-07 102

- user\_name 1 3.4801e-07 102

- magnet\_dumbbell\_x 1 3.4898e-07 102

- pitch\_belt 1 3.4972e-07 102

- total\_accel\_belt 1 3.5031e-07 102

- accel\_forearm\_x 1 3.5034e-07 102

- magnet\_belt\_x 1 3.5051e-07 102

- accel\_forearm\_z 1 3.5059e-07 102

- accel\_arm\_x 1 3.5084e-07 102

- accel\_forearm\_y 1 3.5088e-07 102

- roll\_dumbbell 1 3.5100e-07 102

- gyros\_forearm\_y 1 3.5161e-07 102

- raw\_timestamp\_part\_2 1 3.5174e-07 102

- gyros\_belt\_y 1 3.5197e-07 102

- accel\_dumbbell\_x 1 3.5212e-07 102

- pitch\_forearm 1 3.5262e-07 102

- pitch\_dumbbell 1 3.5382e-07 102

- total\_accel\_dumbbell 1 3.5409e-07 102

- raw\_timestamp\_part\_1 1 3.5481e-07 102

- gyros\_forearm\_z 1 3.5995e-07 102

- magnet\_belt\_z 1 3.6163e-07 102

- accel\_arm\_z 1 3.6326e-07 102

- magnet\_forearm\_x 1 3.6500e-07 102

- magnet\_forearm\_z 1 3.7541e-07 102

- magnet\_arm\_y 1 3.9176e-07 102

- accel\_arm\_y 1 4.0666e-07 102

- pitch\_arm 1 4.2262e-07 102

- num\_window 1 1.5956e-06 102

<none> 3.4146e-07 104

Step: AIC=102

classe ~ user\_name + raw\_timestamp\_part\_1 + raw\_timestamp\_part\_2 +

cvtd\_timestamp + num\_window + roll\_belt + pitch\_belt + total\_accel\_belt +

gyros\_belt\_y + gyros\_belt\_z + accel\_belt\_x + accel\_belt\_y +

accel\_belt\_z + magnet\_belt\_x + magnet\_belt\_y + magnet\_belt\_z +

roll\_arm + pitch\_arm + total\_accel\_arm + gyros\_arm\_x + gyros\_arm\_y +

gyros\_arm\_z + accel\_arm\_x + accel\_arm\_y + accel\_arm\_z + magnet\_arm\_x +

magnet\_arm\_y + magnet\_arm\_z + roll\_dumbbell + pitch\_dumbbell +

yaw\_dumbbell + total\_accel\_dumbbell + gyros\_dumbbell\_z +

accel\_dumbbell\_x + accel\_dumbbell\_y + accel\_dumbbell\_z +

magnet\_dumbbell\_x + pitch\_forearm + yaw\_forearm + total\_accel\_forearm +

var\_yaw\_forearm + gyros\_forearm\_x + gyros\_forearm\_y + gyros\_forearm\_z +

accel\_forearm\_x + accel\_forearm\_y + accel\_forearm\_z + magnet\_forearm\_x +

magnet\_forearm\_y + magnet\_forearm\_z

Df Deviance AIC

- accel\_belt\_z 1 3.4248e-07 100

- gyros\_forearm\_x 1 3.4317e-07 100

- accel\_belt\_x 1 3.4341e-07 100

- magnet\_forearm\_y 1 3.4363e-07 100

- magnet\_belt\_y 1 3.4368e-07 100

- gyros\_dumbbell\_z 1 3.4370e-07 100

- total\_accel\_arm 1 3.4394e-07 100

- yaw\_forearm 1 3.4463e-07 100

- total\_accel\_forearm 1 3.4478e-07 100

- gyros\_arm\_x 1 3.4505e-07 100

- var\_yaw\_forearm 1 3.4534e-07 100

- roll\_arm 1 3.4558e-07 100

- roll\_belt 1 3.4582e-07 100

- magnet\_arm\_z 1 3.4583e-07 100

- accel\_dumbbell\_y 1 3.4586e-07 100

- gyros\_belt\_z 1 3.4594e-07 100

- accel\_dumbbell\_z 1 3.4697e-07 100

- yaw\_dumbbell 1 3.4743e-07 100

- gyros\_arm\_y 1 3.4749e-07 100

- magnet\_arm\_x 1 3.4761e-07 100

- cvtd\_timestamp 1 3.4766e-07 100

- gyros\_arm\_z 1 3.4793e-07 100

- user\_name 1 3.4851e-07 100

- accel\_belt\_y 1 3.4906e-07 100

- magnet\_dumbbell\_x 1 3.4986e-07 100

- pitch\_belt 1 3.5050e-07 100

- magnet\_belt\_x 1 3.5116e-07 100

- total\_accel\_belt 1 3.5116e-07 100

- accel\_forearm\_z 1 3.5130e-07 100

- roll\_dumbbell 1 3.5149e-07 100

- accel\_arm\_x 1 3.5173e-07 100

- accel\_forearm\_y 1 3.5189e-07 100

- accel\_forearm\_x 1 3.5228e-07 100

- raw\_timestamp\_part\_2 1 3.5265e-07 100

- gyros\_belt\_y 1 3.5265e-07 100

- accel\_dumbbell\_x 1 3.5308e-07 100

- pitch\_forearm 1 3.5358e-07 100

- gyros\_forearm\_y 1 3.5379e-07 100

- pitch\_dumbbell 1 3.5479e-07 100

- total\_accel\_dumbbell 1 3.5497e-07 100

- raw\_timestamp\_part\_1 1 3.5573e-07 100

- gyros\_forearm\_z 1 3.6180e-07 100

- magnet\_belt\_z 1 3.6289e-07 100

- accel\_arm\_z 1 3.6342e-07 100

- magnet\_forearm\_x 1 3.6648e-07 100

- magnet\_forearm\_z 1 3.7624e-07 100

- magnet\_arm\_y 1 3.9460e-07 100

- accel\_arm\_y 1 4.0765e-07 100

- pitch\_arm 1 4.2360e-07 100

- num\_window 1 1.5996e-06 100

<none> 3.4185e-07 102

Step: AIC=100

classe ~ user\_name + raw\_timestamp\_part\_1 + raw\_timestamp\_part\_2 +

cvtd\_timestamp + num\_window + roll\_belt + pitch\_belt + total\_accel\_belt +

gyros\_belt\_y + gyros\_belt\_z + accel\_belt\_x + accel\_belt\_y +

magnet\_belt\_x + magnet\_belt\_y + magnet\_belt\_z + roll\_arm +

pitch\_arm + total\_accel\_arm + gyros\_arm\_x + gyros\_arm\_y +

gyros\_arm\_z + accel\_arm\_x + accel\_arm\_y + accel\_arm\_z + magnet\_arm\_x +

magnet\_arm\_y + magnet\_arm\_z + roll\_dumbbell + pitch\_dumbbell +

yaw\_dumbbell + total\_accel\_dumbbell + gyros\_dumbbell\_z +

accel\_dumbbell\_x + accel\_dumbbell\_y + accel\_dumbbell\_z +

magnet\_dumbbell\_x + pitch\_forearm + yaw\_forearm + total\_accel\_forearm +

var\_yaw\_forearm + gyros\_forearm\_x + gyros\_forearm\_y + gyros\_forearm\_z +

accel\_forearm\_x + accel\_forearm\_y + accel\_forearm\_z + magnet\_forearm\_x +

magnet\_forearm\_y + magnet\_forearm\_z

Df Deviance AIC

- magnet\_belt\_y 1 3.4346e-07 98

- accel\_belt\_x 1 3.4368e-07 98

- magnet\_forearm\_y 1 3.4384e-07 98

- gyros\_forearm\_x 1 3.4394e-07 98

- total\_accel\_arm 1 3.4395e-07 98

- gyros\_dumbbell\_z 1 3.4449e-07 98

- total\_accel\_forearm 1 3.4494e-07 98

- gyros\_arm\_x 1 3.4498e-07 98

- var\_yaw\_forearm 1 3.4531e-07 98

- yaw\_forearm 1 3.4546e-07 98

- roll\_arm 1 3.4590e-07 98

- magnet\_arm\_z 1 3.4641e-07 98

- gyros\_belt\_z 1 3.4644e-07 98

- accel\_dumbbell\_y 1 3.4682e-07 98

- magnet\_arm\_x 1 3.4738e-07 98

- cvtd\_timestamp 1 3.4741e-07 98

- yaw\_dumbbell 1 3.4767e-07 98

- accel\_dumbbell\_z 1 3.4784e-07 98

- gyros\_arm\_y 1 3.4788e-07 98

- gyros\_arm\_z 1 3.4835e-07 98

- accel\_belt\_y 1 3.4909e-07 98

- user\_name 1 3.4937e-07 98

- total\_accel\_belt 1 3.5044e-07 98

- magnet\_belt\_x 1 3.5155e-07 98

- accel\_forearm\_z 1 3.5158e-07 98

- magnet\_dumbbell\_x 1 3.5161e-07 98

- accel\_forearm\_y 1 3.5167e-07 98

- pitch\_belt 1 3.5195e-07 98

- roll\_dumbbell 1 3.5206e-07 98

- accel\_forearm\_x 1 3.5215e-07 98

- accel\_arm\_x 1 3.5241e-07 98

- gyros\_belt\_y 1 3.5294e-07 98

- raw\_timestamp\_part\_2 1 3.5331e-07 98

- accel\_dumbbell\_x 1 3.5386e-07 98

- gyros\_forearm\_y 1 3.5414e-07 98

- pitch\_forearm 1 3.5451e-07 98

- total\_accel\_dumbbell 1 3.5510e-07 98

- pitch\_dumbbell 1 3.5525e-07 98

- raw\_timestamp\_part\_1 1 3.5543e-07 98

- roll\_belt 1 3.5621e-07 98

- gyros\_forearm\_z 1 3.6251e-07 98

- magnet\_belt\_z 1 3.6314e-07 98

- accel\_arm\_z 1 3.6343e-07 98

- magnet\_forearm\_x 1 3.6902e-07 98

- magnet\_forearm\_z 1 3.7623e-07 98

- magnet\_arm\_y 1 3.9693e-07 98

- accel\_arm\_y 1 4.1548e-07 98

- pitch\_arm 1 4.2769e-07 98

- num\_window 1 1.7258e-06 98

<none> 3.4248e-07 100

Step: AIC=98

classe ~ user\_name + raw\_timestamp\_part\_1 + raw\_timestamp\_part\_2 +

cvtd\_timestamp + num\_window + roll\_belt + pitch\_belt + total\_accel\_belt +

gyros\_belt\_y + gyros\_belt\_z + accel\_belt\_x + accel\_belt\_y +

magnet\_belt\_x + magnet\_belt\_z + roll\_arm + pitch\_arm + total\_accel\_arm +

gyros\_arm\_x + gyros\_arm\_y + gyros\_arm\_z + accel\_arm\_x + accel\_arm\_y +

accel\_arm\_z + magnet\_arm\_x + magnet\_arm\_y + magnet\_arm\_z +

roll\_dumbbell + pitch\_dumbbell + yaw\_dumbbell + total\_accel\_dumbbell +

gyros\_dumbbell\_z + accel\_dumbbell\_x + accel\_dumbbell\_y +

accel\_dumbbell\_z + magnet\_dumbbell\_x + pitch\_forearm + yaw\_forearm +

total\_accel\_forearm + var\_yaw\_forearm + gyros\_forearm\_x +

gyros\_forearm\_y + gyros\_forearm\_z + accel\_forearm\_x + accel\_forearm\_y +

accel\_forearm\_z + magnet\_forearm\_x + magnet\_forearm\_y + magnet\_forearm\_z

Df Deviance AIC

- gyros\_forearm\_x 1 3.4399e-07 96

- accel\_belt\_x 1 3.4424e-07 96

- total\_accel\_arm 1 3.4442e-07 96

- gyros\_dumbbell\_z 1 3.4494e-07 96

- magnet\_forearm\_y 1 3.4530e-07 96

- gyros\_arm\_x 1 3.4562e-07 96

- total\_accel\_forearm 1 3.4562e-07 96

- var\_yaw\_forearm 1 3.4579e-07 96

- roll\_arm 1 3.4609e-07 96

- magnet\_arm\_z 1 3.4631e-07 96

- yaw\_forearm 1 3.4632e-07 96

- accel\_dumbbell\_y 1 3.4660e-07 96

- gyros\_belt\_z 1 3.4695e-07 96

- accel\_dumbbell\_z 1 3.4763e-07 96

- yaw\_dumbbell 1 3.4808e-07 96

- magnet\_arm\_x 1 3.4811e-07 96

- cvtd\_timestamp 1 3.4850e-07 96

- gyros\_arm\_y 1 3.4853e-07 96

- accel\_belt\_y 1 3.4918e-07 96

- user\_name 1 3.4954e-07 96

- gyros\_arm\_z 1 3.5131e-07 96

- magnet\_belt\_x 1 3.5165e-07 96

- accel\_forearm\_y 1 3.5198e-07 96

- accel\_forearm\_x 1 3.5210e-07 96

- pitch\_belt 1 3.5213e-07 96

- accel\_forearm\_z 1 3.5254e-07 96

- total\_accel\_belt 1 3.5269e-07 96

- roll\_dumbbell 1 3.5278e-07 96

- magnet\_dumbbell\_x 1 3.5316e-07 96

- accel\_dumbbell\_x 1 3.5345e-07 96

- gyros\_forearm\_y 1 3.5410e-07 96

- pitch\_forearm 1 3.5428e-07 96

- total\_accel\_dumbbell 1 3.5484e-07 96

- raw\_timestamp\_part\_2 1 3.5524e-07 96

- pitch\_dumbbell 1 3.5542e-07 96

- gyros\_belt\_y 1 3.5555e-07 96

- accel\_arm\_x 1 3.5580e-07 96

- raw\_timestamp\_part\_1 1 3.5618e-07 96

- roll\_belt 1 3.5661e-07 96

- gyros\_forearm\_z 1 3.6250e-07 96

- accel\_arm\_z 1 3.6357e-07 96

- magnet\_forearm\_x 1 3.6899e-07 96

- magnet\_belt\_z 1 3.7538e-07 96

- magnet\_forearm\_z 1 3.8005e-07 96

- magnet\_arm\_y 1 3.9745e-07 96

- accel\_arm\_y 1 4.1622e-07 96

- pitch\_arm 1 4.2932e-07 96

- num\_window 1 1.7453e-06 96

<none> 3.4346e-07 98

Step: AIC=96

classe ~ user\_name + raw\_timestamp\_part\_1 + raw\_timestamp\_part\_2 +

cvtd\_timestamp + num\_window + roll\_belt + pitch\_belt + total\_accel\_belt +

gyros\_belt\_y + gyros\_belt\_z + accel\_belt\_x + accel\_belt\_y +

magnet\_belt\_x + magnet\_belt\_z + roll\_arm + pitch\_arm + total\_accel\_arm +

gyros\_arm\_x + gyros\_arm\_y + gyros\_arm\_z + accel\_arm\_x + accel\_arm\_y +

accel\_arm\_z + magnet\_arm\_x + magnet\_arm\_y + magnet\_arm\_z +

roll\_dumbbell + pitch\_dumbbell + yaw\_dumbbell + total\_accel\_dumbbell +

gyros\_dumbbell\_z + accel\_dumbbell\_x + accel\_dumbbell\_y +

accel\_dumbbell\_z + magnet\_dumbbell\_x + pitch\_forearm + yaw\_forearm +

total\_accel\_forearm + var\_yaw\_forearm + gyros\_forearm\_y +

gyros\_forearm\_z + accel\_forearm\_x + accel\_forearm\_y + accel\_forearm\_z +

magnet\_forearm\_x + magnet\_forearm\_y + magnet\_forearm\_z

Df Deviance AIC

- accel\_belt\_x 1 3.4466e-07 94

- var\_yaw\_forearm 1 3.4489e-07 94

- total\_accel\_forearm 1 3.4501e-07 94

- magnet\_forearm\_y 1 3.4550e-07 94

- magnet\_arm\_z 1 3.4650e-07 94

- gyros\_dumbbell\_z 1 3.4717e-07 94

- gyros\_belt\_z 1 3.4735e-07 94

- yaw\_dumbbell 1 3.4749e-07 94

- accel\_dumbbell\_z 1 3.4763e-07 94

- total\_accel\_arm 1 3.4826e-07 94

- accel\_dumbbell\_y 1 3.4882e-07 94

- roll\_arm 1 3.4901e-07 94

- yaw\_forearm 1 3.4921e-07 94

- cvtd\_timestamp 1 3.5009e-07 94

- roll\_dumbbell 1 3.5200e-07 94

- magnet\_arm\_x 1 3.5232e-07 94

- gyros\_arm\_x 1 3.5299e-07 94

- accel\_forearm\_y 1 3.5306e-07 94

- accel\_belt\_y 1 3.5311e-07 94

- gyros\_arm\_z 1 3.5353e-07 94

- magnet\_dumbbell\_x 1 3.5371e-07 94

- raw\_timestamp\_part\_2 1 3.5481e-07 94

- gyros\_arm\_y 1 3.5482e-07 94

- accel\_arm\_x 1 3.5494e-07 94

- total\_accel\_belt 1 3.5517e-07 94

- pitch\_belt 1 3.5574e-07 94

- accel\_dumbbell\_x 1 3.5591e-07 94

- gyros\_belt\_y 1 3.5631e-07 94

- user\_name 1 3.5659e-07 94

- magnet\_belt\_x 1 3.5699e-07 94

- pitch\_forearm 1 3.5728e-07 94

- total\_accel\_dumbbell 1 3.5756e-07 94

- accel\_forearm\_x 1 3.5848e-07 94

- roll\_belt 1 3.5854e-07 94

- pitch\_dumbbell 1 3.5974e-07 94

- accel\_forearm\_z 1 3.6140e-07 94

- accel\_arm\_z 1 3.6616e-07 94

- raw\_timestamp\_part\_1 1 3.7376e-07 94

- gyros\_forearm\_z 1 3.7938e-07 94

- magnet\_belt\_z 1 3.7940e-07 94

- magnet\_forearm\_x 1 3.8296e-07 94

- magnet\_forearm\_z 1 3.9236e-07 94

- magnet\_arm\_y 1 3.9757e-07 94

- gyros\_forearm\_y 1 4.0358e-07 94

- accel\_arm\_y 1 4.1705e-07 94

- pitch\_arm 1 4.2851e-07 94

- num\_window 1 1.7577e-06 94

<none> 3.4399e-07 96

Step: AIC=94

classe ~ user\_name + raw\_timestamp\_part\_1 + raw\_timestamp\_part\_2 +

cvtd\_timestamp + num\_window + roll\_belt + pitch\_belt + total\_accel\_belt +

gyros\_belt\_y + gyros\_belt\_z + accel\_belt\_y + magnet\_belt\_x +

magnet\_belt\_z + roll\_arm + pitch\_arm + total\_accel\_arm +

gyros\_arm\_x + gyros\_arm\_y + gyros\_arm\_z + accel\_arm\_x + accel\_arm\_y +

accel\_arm\_z + magnet\_arm\_x + magnet\_arm\_y + magnet\_arm\_z +

roll\_dumbbell + pitch\_dumbbell + yaw\_dumbbell + total\_accel\_dumbbell +

gyros\_dumbbell\_z + accel\_dumbbell\_x + accel\_dumbbell\_y +

accel\_dumbbell\_z + magnet\_dumbbell\_x + pitch\_forearm + yaw\_forearm +

total\_accel\_forearm + var\_yaw\_forearm + gyros\_forearm\_y +

gyros\_forearm\_z + accel\_forearm\_x + accel\_forearm\_y + accel\_forearm\_z +

magnet\_forearm\_x + magnet\_forearm\_y + magnet\_forearm\_z

Df Deviance AIC

- var\_yaw\_forearm 1 3.4495e-07 92

- total\_accel\_forearm 1 3.4566e-07 92

- magnet\_forearm\_y 1 3.4634e-07 92

- magnet\_arm\_z 1 3.4673e-07 92

- yaw\_dumbbell 1 3.4767e-07 92

- accel\_dumbbell\_z 1 3.4782e-07 92

- accel\_dumbbell\_y 1 3.4888e-07 92

- gyros\_dumbbell\_z 1 3.4896e-07 92

- gyros\_belt\_z 1 3.4908e-07 92

- total\_accel\_arm 1 3.4923e-07 92

- roll\_arm 1 3.4939e-07 92

- yaw\_forearm 1 3.4981e-07 92

- cvtd\_timestamp 1 3.5061e-07 92

- roll\_dumbbell 1 3.5203e-07 92

- magnet\_arm\_x 1 3.5240e-07 92

- gyros\_arm\_x 1 3.5292e-07 92

- accel\_forearm\_y 1 3.5308e-07 92

- accel\_belt\_y 1 3.5348e-07 92

- magnet\_dumbbell\_x 1 3.5383e-07 92

- raw\_timestamp\_part\_2 1 3.5486e-07 92

- gyros\_arm\_y 1 3.5486e-07 92

- pitch\_belt 1 3.5577e-07 92

- gyros\_arm\_z 1 3.5583e-07 92

- accel\_arm\_x 1 3.5636e-07 92

- user\_name 1 3.5651e-07 92

- magnet\_belt\_x 1 3.5700e-07 92

- gyros\_belt\_y 1 3.5700e-07 92

- total\_accel\_belt 1 3.5707e-07 92

- accel\_dumbbell\_x 1 3.5710e-07 92

- total\_accel\_dumbbell 1 3.5748e-07 92

- pitch\_forearm 1 3.5843e-07 92

- accel\_forearm\_x 1 3.5928e-07 92

- roll\_belt 1 3.5938e-07 92

- accel\_forearm\_z 1 3.6154e-07 92

- pitch\_dumbbell 1 3.6154e-07 92

- accel\_arm\_z 1 3.6693e-07 92

- raw\_timestamp\_part\_1 1 3.7459e-07 92

- magnet\_belt\_z 1 3.7942e-07 92

- gyros\_forearm\_z 1 3.8027e-07 92

- magnet\_forearm\_x 1 3.8327e-07 92

- magnet\_arm\_y 1 3.9812e-07 92

- magnet\_forearm\_z 1 4.0119e-07 92

- gyros\_forearm\_y 1 4.0381e-07 92

- accel\_arm\_y 1 4.1698e-07 92

- pitch\_arm 1 4.2840e-07 92

- num\_window 1 1.8004e-06 92

<none> 3.4466e-07 94

Step: AIC=92

classe ~ user\_name + raw\_timestamp\_part\_1 + raw\_timestamp\_part\_2 +

cvtd\_timestamp + num\_window + roll\_belt + pitch\_belt + total\_accel\_belt +

gyros\_belt\_y + gyros\_belt\_z + accel\_belt\_y + magnet\_belt\_x +

magnet\_belt\_z + roll\_arm + pitch\_arm + total\_accel\_arm +

gyros\_arm\_x + gyros\_arm\_y + gyros\_arm\_z + accel\_arm\_x + accel\_arm\_y +

accel\_arm\_z + magnet\_arm\_x + magnet\_arm\_y + magnet\_arm\_z +

roll\_dumbbell + pitch\_dumbbell + yaw\_dumbbell + total\_accel\_dumbbell +

gyros\_dumbbell\_z + accel\_dumbbell\_x + accel\_dumbbell\_y +

accel\_dumbbell\_z + magnet\_dumbbell\_x + pitch\_forearm + yaw\_forearm +

total\_accel\_forearm + gyros\_forearm\_y + gyros\_forearm\_z +

accel\_forearm\_x + accel\_forearm\_y + accel\_forearm\_z + magnet\_forearm\_x +

magnet\_forearm\_y + magnet\_forearm\_z

Df Deviance AIC

- total\_accel\_forearm 1 3.4599e-07 90

- magnet\_forearm\_y 1 3.4651e-07 90

- accel\_dumbbell\_z 1 3.4659e-07 90

- yaw\_dumbbell 1 3.4718e-07 90

- magnet\_arm\_z 1 3.4786e-07 90

- total\_accel\_arm 1 3.4857e-07 90

- gyros\_dumbbell\_z 1 3.4859e-07 90

- accel\_dumbbell\_y 1 3.4892e-07 90

- cvtd\_timestamp 1 3.4945e-07 90

- gyros\_belt\_z 1 3.4953e-07 90

- yaw\_forearm 1 3.5023e-07 90

- roll\_arm 1 3.5050e-07 90

- roll\_dumbbell 1 3.5213e-07 90

- accel\_belt\_y 1 3.5281e-07 90

- accel\_forearm\_y 1 3.5326e-07 90

- gyros\_arm\_x 1 3.5398e-07 90

- magnet\_arm\_x 1 3.5425e-07 90

- gyros\_arm\_y 1 3.5530e-07 90

- magnet\_dumbbell\_x 1 3.5538e-07 90

- gyros\_arm\_z 1 3.5620e-07 90

- raw\_timestamp\_part\_2 1 3.5661e-07 90

- accel\_arm\_x 1 3.5672e-07 90

- accel\_dumbbell\_x 1 3.5675e-07 90

- gyros\_belt\_y 1 3.5676e-07 90

- magnet\_belt\_x 1 3.5706e-07 90

- user\_name 1 3.5711e-07 90

- total\_accel\_belt 1 3.5727e-07 90

- pitch\_belt 1 3.5732e-07 90

- total\_accel\_dumbbell 1 3.5735e-07 90

- accel\_forearm\_x 1 3.5858e-07 90

- pitch\_forearm 1 3.5870e-07 90

- pitch\_dumbbell 1 3.6130e-07 90

- accel\_forearm\_z 1 3.6248e-07 90

- roll\_belt 1 3.6253e-07 90

- accel\_arm\_z 1 3.6622e-07 90

- raw\_timestamp\_part\_1 1 3.7472e-07 90

- magnet\_belt\_z 1 3.7930e-07 90

- gyros\_forearm\_z 1 3.8018e-07 90

- magnet\_forearm\_x 1 3.8329e-07 90

- magnet\_arm\_y 1 3.9768e-07 90

- magnet\_forearm\_z 1 4.0117e-07 90

- gyros\_forearm\_y 1 4.0367e-07 90

- accel\_arm\_y 1 4.1597e-07 90

- pitch\_arm 1 4.2931e-07 90

- num\_window 1 1.8155e-06 90

<none> 3.4495e-07 92

Step: AIC=90

classe ~ user\_name + raw\_timestamp\_part\_1 + raw\_timestamp\_part\_2 +

cvtd\_timestamp + num\_window + roll\_belt + pitch\_belt + total\_accel\_belt +

gyros\_belt\_y + gyros\_belt\_z + accel\_belt\_y + magnet\_belt\_x +

magnet\_belt\_z + roll\_arm + pitch\_arm + total\_accel\_arm +

gyros\_arm\_x + gyros\_arm\_y + gyros\_arm\_z + accel\_arm\_x + accel\_arm\_y +

accel\_arm\_z + magnet\_arm\_x + magnet\_arm\_y + magnet\_arm\_z +

roll\_dumbbell + pitch\_dumbbell + yaw\_dumbbell + total\_accel\_dumbbell +

gyros\_dumbbell\_z + accel\_dumbbell\_x + accel\_dumbbell\_y +

accel\_dumbbell\_z + magnet\_dumbbell\_x + pitch\_forearm + yaw\_forearm +

gyros\_forearm\_y + gyros\_forearm\_z + accel\_forearm\_x + accel\_forearm\_y +

accel\_forearm\_z + magnet\_forearm\_x + magnet\_forearm\_y + magnet\_forearm\_z

- roll\_dumbbell 1 0.00 70.00

- accel\_belt\_y 1 0.00 70.00

- magnet\_belt\_x 1 0.00 70.00

- gyros\_dumbbell\_z 1 0.00 70.00

- pitch\_belt 1 0.00 70.00

- raw\_timestamp\_part\_2 1 0.00 70.00

- user\_name 1 0.00 70.00

- pitch\_forearm 1 0.00 70.00

- magnet\_arm\_x 1 0.00 70.00

- total\_accel\_arm 1 0.00 70.00

- accel\_forearm\_z 1 0.00 70.00

- accel\_arm\_x 1 0.00 70.00

- total\_accel\_belt 1 0.00 70.00

- roll\_belt 1 0.00 70.00

- pitch\_dumbbell 1 0.00 70.00

- accel\_arm\_z 1 0.00 70.00

- accel\_dumbbell\_x 1 0.00 70.00

- magnet\_belt\_z 1 0.00 70.00

- magnet\_dumbbell\_x 1 0.00 70.00

- gyros\_arm\_z 1 0.00 70.00

- accel\_forearm\_x 1 0.00 70.00

- accel\_forearm\_y 1 0.00 70.00

- total\_accel\_dumbbell 1 0.00 70.00

- magnet\_forearm\_x 1 0.00 70.00

- gyros\_forearm\_z 1 0.00 70.00

- magnet\_forearm\_z 1 0.00 70.00

- raw\_timestamp\_part\_1 1 0.00 70.00

- gyros\_forearm\_y 1 0.00 70.00

- magnet\_arm\_y 1 0.00 70.00

- pitch\_arm 1 0.00 70.00

- accel\_arm\_y 1 0.00 70.00

<none> 0.00 72.00

- num\_window 1 349.23 419.23

Step: AIC=70

classe ~ user\_name + raw\_timestamp\_part\_1 + raw\_timestamp\_part\_2 +

num\_window + roll\_belt + pitch\_belt + total\_accel\_belt +

gyros\_belt\_y + accel\_belt\_y + magnet\_belt\_x + magnet\_belt\_z +

roll\_arm + pitch\_arm + total\_accel\_arm + gyros\_arm\_z + accel\_arm\_x +

accel\_arm\_y + accel\_arm\_z + magnet\_arm\_x + magnet\_arm\_y +

roll\_dumbbell + pitch\_dumbbell + total\_accel\_dumbbell + gyros\_dumbbell\_z

+

accel\_dumbbell\_x + magnet\_dumbbell\_x + pitch\_forearm + gyros\_forearm\_y +

gyros\_forearm\_z + accel\_forearm\_x + accel\_forearm\_y + accel\_forearm\_z +

magnet\_forearm\_x + magnet\_forearm\_z

Df Deviance AIC

- gyros\_belt\_y 1 0.00 68.00

- roll\_arm 1 0.00 68.00

- roll\_dumbbell 1 0.00 68.00

- accel\_belt\_y 1 0.00 68.00

- magnet\_belt\_x 1 0.00 68.00

- raw\_timestamp\_part\_2 1 0.00 68.00

- gyros\_dumbbell\_z 1 0.00 68.00

- pitch\_belt 1 0.00 68.00

- pitch\_forearm 1 0.00 68.00

- user\_name 1 0.00 68.00

- accel\_forearm\_z 1 0.00 68.00

- magnet\_arm\_x 1 0.00 68.00

- total\_accel\_belt 1 0.00 68.00

- total\_accel\_arm 1 0.00 68.00

- accel\_arm\_x 1 0.00 68.00

- roll\_belt 1 0.00 68.00

- pitch\_dumbbell 1 0.00 68.00

- accel\_dumbbell\_x 1 0.00 68.00

- accel\_arm\_z 1 0.00 68.00

- magnet\_belt\_z 1 0.00 68.00

- magnet\_dumbbell\_x 1 0.00 68.00

- total\_accel\_dumbbell 1 0.00 68.00

- gyros\_arm\_z 1 0.00 68.00

- accel\_forearm\_y 1 0.00 68.00

- accel\_forearm\_x 1 0.00 68.00

- magnet\_forearm\_x 1 0.00 68.00

- gyros\_forearm\_z 1 0.00 68.00

- magnet\_forearm\_z 1 0.00 68.00

- raw\_timestamp\_part\_1 1 0.00 68.00

- gyros\_forearm\_y 1 0.00 68.00

- pitch\_arm 1 0.00 68.00

- accel\_arm\_y 1 0.00 68.00

- magnet\_arm\_y 1 0.00 68.00

<none> 0.00 70.00

- num\_window 1 356.37 424.37

Step: AIC=68

classe ~ user\_name + raw\_timestamp\_part\_1 + raw\_timestamp\_part\_2 +

num\_window + roll\_belt + pitch\_belt + total\_accel\_belt +

accel\_belt\_y + magnet\_belt\_x + magnet\_belt\_z + roll\_arm +

pitch\_arm + total\_accel\_arm + gyros\_arm\_z + accel\_arm\_x +

accel\_arm\_y + accel\_arm\_z + magnet\_arm\_x + magnet\_arm\_y +

roll\_dumbbell + pitch\_dumbbell + total\_accel\_dumbbell + gyros\_dumbbell\_z

+

accel\_dumbbell\_x + magnet\_dumbbell\_x + pitch\_forearm + gyros\_forearm\_y +

gyros\_forearm\_z + accel\_forearm\_x + accel\_forearm\_y + accel\_forearm\_z +

magnet\_forearm\_x + magnet\_forearm\_z

Df Deviance AIC

- roll\_arm 1 0.00 66.00

- accel\_belt\_y 1 0.00 66.00

- roll\_dumbbell 1 0.00 66.00

- magnet\_belt\_x 1 0.00 66.00

- gyros\_dumbbell\_z 1 0.00 66.00

- pitch\_belt 1 0.00 66.00

- raw\_timestamp\_part\_2 1 0.00 66.00

- user\_name 1 0.00 66.00

- pitch\_forearm 1 0.00 66.00

- magnet\_arm\_x 1 0.00 66.00

- accel\_forearm\_z 1 0.00 66.00

- total\_accel\_arm 1 0.00 66.00

- accel\_arm\_x 1 0.00 66.00

- total\_accel\_belt 1 0.00 66.00

- pitch\_dumbbell 1 0.00 66.00

- roll\_belt 1 0.00 66.00

- accel\_arm\_z 1 0.00 66.00

- accel\_dumbbell\_x 1 0.00 66.00

- magnet\_belt\_z 1 0.00 66.00

- magnet\_dumbbell\_x 1 0.00 66.00

- gyros\_arm\_z 1 0.00 66.00

- accel\_forearm\_y 1 0.00 66.00

- total\_accel\_dumbbell 1 0.00 66.00

- accel\_forearm\_x 1 0.00 66.00

- magnet\_forearm\_x 1 0.00 66.00

- gyros\_forearm\_z 1 0.00 66.00

- magnet\_forearm\_z 1 0.00 66.00

- raw\_timestamp\_part\_1 1 0.00 66.00

- gyros\_forearm\_y 1 0.00 66.00

- pitch\_arm 1 0.00 66.00

- accel\_arm\_y 1 0.00 66.00

- magnet\_arm\_y 1 0.00 66.00

<none> 0.00 68.00

- num\_window 1 364.03 430.03

Step: AIC=66

classe ~ user\_name + raw\_timestamp\_part\_1 + raw\_timestamp\_part\_2 +

num\_window + roll\_belt + pitch\_belt + total\_accel\_belt +

accel\_belt\_y + magnet\_belt\_x + magnet\_belt\_z + pitch\_arm +

total\_accel\_arm + gyros\_arm\_z + accel\_arm\_x + accel\_arm\_y +

accel\_arm\_z + magnet\_arm\_x + magnet\_arm\_y + roll\_dumbbell +

pitch\_dumbbell + total\_accel\_dumbbell + gyros\_dumbbell\_z +

accel\_dumbbell\_x + magnet\_dumbbell\_x + pitch\_forearm + gyros\_forearm\_y +

gyros\_forearm\_z + accel\_forearm\_x + accel\_forearm\_y + accel\_forearm\_z +

magnet\_forearm\_x + magnet\_forearm\_z

Df Deviance AIC

- accel\_belt\_y 1 0.00 64.00

- raw\_timestamp\_part\_2 1 0.00 64.00

- roll\_dumbbell 1 0.00 64.00

- magnet\_belt\_x 1 0.00 64.00

- pitch\_belt 1 0.00 64.00

- user\_name 1 0.00 64.00

- pitch\_forearm 1 0.00 64.00

- accel\_forearm\_z 1 0.00 64.00

- magnet\_arm\_x 1 0.00 64.00

- accel\_arm\_x 1 0.00 64.00

- total\_accel\_arm 1 0.00 64.00

- gyros\_dumbbell\_z 1 0.00 64.00

- pitch\_dumbbell 1 0.00 64.00

- total\_accel\_belt 1 0.00 64.00

- roll\_belt 1 0.00 64.00

- magnet\_belt\_z 1 0.00 64.00

- accel\_dumbbell\_x 1 0.00 64.00

- accel\_arm\_z 1 0.00 64.00

- magnet\_dumbbell\_x 1 0.00 64.00

- total\_accel\_dumbbell 1 0.00 64.00

- accel\_forearm\_y 1 0.00 64.00

- accel\_forearm\_x 1 0.00 64.00

- magnet\_forearm\_x 1 0.00 64.00

- gyros\_arm\_z 1 0.00 64.00

- gyros\_forearm\_z 1 0.00 64.00

- raw\_timestamp\_part\_1 1 0.00 64.00

- magnet\_forearm\_z 1 0.00 64.00

- gyros\_forearm\_y 1 0.00 64.00

- pitch\_arm 1 0.00 64.00

- accel\_arm\_y 1 0.00 64.00

- magnet\_arm\_y 1 0.00 64.00

<none> 0.00 66.00

- num\_window 1 364.24 428.24

Step: AIC=64

classe ~ user\_name + raw\_timestamp\_part\_1 + raw\_timestamp\_part\_2 +

num\_window + roll\_belt + pitch\_belt + total\_accel\_belt +

magnet\_belt\_x + magnet\_belt\_z + pitch\_arm + total\_accel\_arm +

gyros\_arm\_z + accel\_arm\_x + accel\_arm\_y + accel\_arm\_z + magnet\_arm\_x +

magnet\_arm\_y + roll\_dumbbell + pitch\_dumbbell + total\_accel\_dumbbell +

gyros\_dumbbell\_z + accel\_dumbbell\_x + magnet\_dumbbell\_x +

pitch\_forearm + gyros\_forearm\_y + gyros\_forearm\_z + accel\_forearm\_x +

accel\_forearm\_y + accel\_forearm\_z + magnet\_forearm\_x + magnet\_forearm\_z

Df Deviance AIC

- raw\_timestamp\_part\_2 1 0.00 62.00

- magnet\_belt\_x 1 0.00 62.00

- roll\_dumbbell 1 0.00 62.00

- pitch\_belt 1 0.00 62.00

- pitch\_forearm 1 0.00 62.00

- user\_name 1 0.00 62.00

- accel\_arm\_x 1 0.00 62.00

- magnet\_arm\_x 1 0.00 62.00

- total\_accel\_arm 1 0.00 62.00

- accel\_forearm\_z 1 0.00 62.00

- total\_accel\_belt 1 0.00 62.00

- pitch\_dumbbell 1 0.00 62.00

- gyros\_dumbbell\_z 1 0.00 62.00

- roll\_belt 1 0.00 62.00

- magnet\_belt\_z 1 0.00 62.00

- accel\_arm\_z 1 0.00 62.00

- total\_accel\_dumbbell 1 0.00 62.00

- accel\_dumbbell\_x 1 0.00 62.00

- accel\_forearm\_y 1 0.00 62.00

- accel\_forearm\_x 1 0.00 62.00

- magnet\_dumbbell\_x 1 0.00 62.00

- magnet\_forearm\_x 1 0.00 62.00

- gyros\_arm\_z 1 0.00 62.00

- gyros\_forearm\_z 1 0.00 62.00

- raw\_timestamp\_part\_1 1 0.00 62.00

- magnet\_forearm\_z 1 0.00 62.00

- gyros\_forearm\_y 1 0.00 62.00

- pitch\_arm 1 0.00 62.00

- accel\_arm\_y 1 0.00 62.00

- magnet\_arm\_y 1 0.00 62.00

<none> 0.00 64.00

- num\_window 1 379.83 441.83

Step: AIC=62

classe ~ user\_name + raw\_timestamp\_part\_1 + num\_window + roll\_belt +

pitch\_belt + total\_accel\_belt + magnet\_belt\_x + magnet\_belt\_z +

pitch\_arm + total\_accel\_arm + gyros\_arm\_z + accel\_arm\_x +

accel\_arm\_y + accel\_arm\_z + magnet\_arm\_x + magnet\_arm\_y +

roll\_dumbbell + pitch\_dumbbell + total\_accel\_dumbbell + gyros\_dumbbell\_z

+

accel\_dumbbell\_x + magnet\_dumbbell\_x + pitch\_forearm + gyros\_forearm\_y +

gyros\_forearm\_z + accel\_forearm\_x + accel\_forearm\_y + accel\_forearm\_z +

magnet\_forearm\_x + magnet\_forearm\_z

Df Deviance AIC

- pitch\_belt 1 0.0 60.0

- roll\_dumbbell 1 0.0 60.0

- user\_name 1 0.0 60.0

- magnet\_belt\_x 1 0.0 60.0

- pitch\_forearm 1 0.0 60.0

- total\_accel\_belt 1 0.0 60.0

- magnet\_arm\_x 1 0.0 60.0

- accel\_forearm\_z 1 0.0 60.0

- pitch\_dumbbell 1 0.0 60.0

- accel\_arm\_x 1 0.0 60.0

- total\_accel\_arm 1 0.0 60.0

- roll\_belt 1 0.0 60.0

- magnet\_belt\_z 1 0.0 60.0

- total\_accel\_dumbbell 1 0.0 60.0

- accel\_dumbbell\_x 1 0.0 60.0

- gyros\_dumbbell\_z 1 0.0 60.0

- accel\_arm\_z 1 0.0 60.0

- magnet\_dumbbell\_x 1 0.0 60.0

- magnet\_forearm\_x 1 0.0 60.0

- accel\_forearm\_x 1 0.0 60.0

- gyros\_arm\_z 1 0.0 60.0

- accel\_forearm\_y 1 0.0 60.0

- raw\_timestamp\_part\_1 1 0.0 60.0

- gyros\_forearm\_z 1 0.0 60.0

- magnet\_forearm\_z 1 0.0 60.0

- gyros\_forearm\_y 1 0.0 60.0

- pitch\_arm 1 0.0 60.0

- accel\_arm\_y 1 0.0 60.0

- magnet\_arm\_y 1 0.0 60.0

<none> 0.0 62.0

- num\_window 1 384.5 444.5

Step: AIC=60

classe ~ user\_name + raw\_timestamp\_part\_1 + num\_window + roll\_belt +

total\_accel\_belt + magnet\_belt\_x + magnet\_belt\_z + pitch\_arm +

total\_accel\_arm + gyros\_arm\_z + accel\_arm\_x + accel\_arm\_y +

accel\_arm\_z + magnet\_arm\_x + magnet\_arm\_y + roll\_dumbbell +

pitch\_dumbbell + total\_accel\_dumbbell + gyros\_dumbbell\_z +

accel\_dumbbell\_x + magnet\_dumbbell\_x + pitch\_forearm + gyros\_forearm\_y +

gyros\_forearm\_z + accel\_forearm\_x + accel\_forearm\_y + accel\_forearm\_z +

magnet\_forearm\_x + magnet\_forearm\_z

Df Deviance AIC

- user\_name 1 0.00 58.00

- magnet\_belt\_x 1 0.00 58.00

- roll\_dumbbell 1 0.00 58.00

- total\_accel\_belt 1 0.00 58.00

- pitch\_dumbbell 1 0.00 58.00

- magnet\_arm\_x 1 0.00 58.00

- pitch\_forearm 1 0.00 58.00

- accel\_forearm\_z 1 0.00 58.00

- magnet\_belt\_z 1 0.00 58.00

- total\_accel\_arm 1 0.00 58.00

- accel\_dumbbell\_x 1 0.00 58.00

- accel\_arm\_x 1 0.00 58.00

- total\_accel\_dumbbell 1 0.00 58.00

- roll\_belt 1 0.00 58.00

- gyros\_dumbbell\_z 1 0.00 58.00

- magnet\_forearm\_x 1 0.00 58.00

- magnet\_dumbbell\_x 1 0.00 58.00

- accel\_forearm\_x 1 0.00 58.00

- accel\_arm\_z 1 0.00 58.00

- accel\_forearm\_y 1 0.00 58.00

- gyros\_arm\_z 1 0.00 58.00

- raw\_timestamp\_part\_1 1 0.00 58.00

- gyros\_forearm\_z 1 0.00 58.00

- magnet\_forearm\_z 1 0.00 58.00

- gyros\_forearm\_y 1 0.00 58.00

- pitch\_arm 1 0.00 58.00

- accel\_arm\_y 1 0.00 58.00

- magnet\_arm\_y 1 0.00 58.00

<none> 0.00 60.00

- num\_window 1 559.11 617.11

Step: AIC=58

classe ~ raw\_timestamp\_part\_1 + num\_window + roll\_belt + total\_accel\_belt +

magnet\_belt\_x + magnet\_belt\_z + pitch\_arm + total\_accel\_arm +

gyros\_arm\_z + accel\_arm\_x + accel\_arm\_y + accel\_arm\_z + magnet\_arm\_x +

magnet\_arm\_y + roll\_dumbbell + pitch\_dumbbell + total\_accel\_dumbbell +

gyros\_dumbbell\_z + accel\_dumbbell\_x + magnet\_dumbbell\_x +

pitch\_forearm + gyros\_forearm\_y + gyros\_forearm\_z + accel\_forearm\_x +

accel\_forearm\_y + accel\_forearm\_z + magnet\_forearm\_x + magnet\_forearm\_z

Df Deviance AIC

- magnet\_belt\_x 1 0.00 56.00

- roll\_dumbbell 1 0.00 56.00

- pitch\_forearm 1 0.00 56.00

- accel\_forearm\_z 1 0.00 56.00

- pitch\_dumbbell 1 0.00 56.00

- magnet\_belt\_z 1 0.00 56.00

- magnet\_arm\_x 1 0.00 56.00

- total\_accel\_belt 1 0.00 56.00

- total\_accel\_arm 1 0.00 56.00

- accel\_arm\_x 1 0.00 56.00

- gyros\_dumbbell\_z 1 0.00 56.00

- roll\_belt 1 0.00 56.00

- magnet\_forearm\_x 1 0.00 56.00

- accel\_forearm\_y 1 0.00 56.00

- accel\_arm\_z 1 0.00 56.00

- accel\_dumbbell\_x 1 0.00 56.00

- accel\_forearm\_x 1 0.00 56.00

- raw\_timestamp\_part\_1 1 0.00 56.00

- total\_accel\_dumbbell 1 0.00 56.00

- gyros\_arm\_z 1 0.00 56.00

- gyros\_forearm\_z 1 0.00 56.00

- magnet\_forearm\_z 1 0.00 56.00

- magnet\_dumbbell\_x 1 0.00 56.00

- gyros\_forearm\_y 1 0.00 56.00

- accel\_arm\_y 1 0.00 56.00

- pitch\_arm 1 0.00 56.00

- magnet\_arm\_y 1 0.00 56.00

<none> 0.00 58.00

- num\_window 1 873.48 929.48

Step: AIC=56

classe ~ raw\_timestamp\_part\_1 + num\_window + roll\_belt + total\_accel\_belt +

magnet\_belt\_z + pitch\_arm + total\_accel\_arm + gyros\_arm\_z +

accel\_arm\_x + accel\_arm\_y + accel\_arm\_z + magnet\_arm\_x +

magnet\_arm\_y + roll\_dumbbell + pitch\_dumbbell + total\_accel\_dumbbell +

gyros\_dumbbell\_z + accel\_dumbbell\_x + magnet\_dumbbell\_x +

pitch\_forearm + gyros\_forearm\_y + gyros\_forearm\_z + accel\_forearm\_x +

accel\_forearm\_y + accel\_forearm\_z + magnet\_forearm\_x + magnet\_forearm\_z

Df Deviance AIC

- roll\_dumbbell 1 0.00 54.0

- pitch\_forearm 1 0.00 54.0

- magnet\_belt\_z 1 0.00 54.0

- magnet\_arm\_x 1 0.00 54.0

- accel\_forearm\_z 1 0.00 54.0

- pitch\_dumbbell 1 0.00 54.0

- total\_accel\_belt 1 0.00 54.0

- accel\_arm\_x 1 0.00 54.0

- total\_accel\_arm 1 0.00 54.0

- gyros\_dumbbell\_z 1 0.00 54.0

- roll\_belt 1 0.00 54.0

- magnet\_forearm\_x 1 0.00 54.0

- accel\_forearm\_y 1 0.00 54.0

- accel\_arm\_z 1 0.00 54.0

- accel\_dumbbell\_x 1 0.00 54.0

- accel\_forearm\_x 1 0.00 54.0

- total\_accel\_dumbbell 1 0.00 54.0

- gyros\_forearm\_z 1 0.00 54.0

- gyros\_arm\_z 1 0.00 54.0

- magnet\_forearm\_z 1 0.00 54.0

- magnet\_dumbbell\_x 1 0.00 54.0

- gyros\_forearm\_y 1 0.00 54.0

- raw\_timestamp\_part\_1 1 0.00 54.0

- accel\_arm\_y 1 0.00 54.0

- pitch\_arm 1 0.00 54.0

- magnet\_arm\_y 1 0.00 54.0

<none> 0.00 56.0

- num\_window 1 995.31 1049.3

Step: AIC=54

classe ~ raw\_timestamp\_part\_1 + num\_window + roll\_belt + total\_accel\_belt +

magnet\_belt\_z + pitch\_arm + total\_accel\_arm + gyros\_arm\_z +

accel\_arm\_x + accel\_arm\_y + accel\_arm\_z + magnet\_arm\_x +

magnet\_arm\_y + pitch\_dumbbell + total\_accel\_dumbbell + gyros\_dumbbell\_z +

accel\_dumbbell\_x + magnet\_dumbbell\_x + pitch\_forearm + gyros\_forearm\_y +

gyros\_forearm\_z + accel\_forearm\_x + accel\_forearm\_y + accel\_forearm\_z +

magnet\_forearm\_x + magnet\_forearm\_z

Df Deviance AIC

- pitch\_dumbbell 1 0 52

- magnet\_arm\_x 1 0 52

- pitch\_forearm 1 0 52

- accel\_forearm\_z 1 0 52

- total\_accel\_belt 1 0 52

- magnet\_belt\_z 1 0 52

- gyros\_dumbbell\_z 1 0 52

- total\_accel\_arm 1 0 52

- accel\_arm\_x 1 0 52

- roll\_belt 1 0 52

- magnet\_forearm\_x 1 0 52

- accel\_forearm\_y 1 0 52

- accel\_dumbbell\_x 1 0 52

- accel\_forearm\_x 1 0 52

- accel\_arm\_z 1 0 52

- total\_accel\_dumbbell 1 0 52

- gyros\_forearm\_z 1 0 52

- magnet\_forearm\_z 1 0 52

- gyros\_arm\_z 1 0 52

- magnet\_dumbbell\_x 1 0 52

- gyros\_forearm\_y 1 0 52

- raw\_timestamp\_part\_1 1 0 52

- pitch\_arm 1 0 52

- accel\_arm\_y 1 0 52

- magnet\_arm\_y 1 0 52

<none> 0 54

- num\_window 1 1062 1114

Step: AIC=52

classe ~ raw\_timestamp\_part\_1 + num\_window + roll\_belt + total\_accel\_belt +

magnet\_belt\_z + pitch\_arm + total\_accel\_arm + gyros\_arm\_z +

accel\_arm\_x + accel\_arm\_y + accel\_arm\_z + magnet\_arm\_x +

magnet\_arm\_y + total\_accel\_dumbbell + gyros\_dumbbell\_z +

accel\_dumbbell\_x + magnet\_dumbbell\_x + pitch\_forearm + gyros\_forearm\_y +

gyros\_forearm\_z + accel\_forearm\_x + accel\_forearm\_y + accel\_forearm\_z +

magnet\_forearm\_x + magnet\_forearm\_z

Df Deviance AIC

- magnet\_arm\_x 1 0.0 50.0

- accel\_forearm\_z 1 0.0 50.0

- total\_accel\_belt 1 0.0 50.0

- magnet\_belt\_z 1 0.0 50.0

- gyros\_dumbbell\_z 1 0.0 50.0

- pitch\_forearm 1 0.0 50.0

- total\_accel\_arm 1 0.0 50.0

- accel\_arm\_x 1 0.0 50.0

- accel\_forearm\_y 1 0.0 50.0

- roll\_belt 1 0.0 50.0

- accel\_arm\_z 1 0.0 50.0

- accel\_dumbbell\_x 1 0.0 50.0

- magnet\_forearm\_x 1 0.0 50.0

- accel\_forearm\_x 1 0.0 50.0

- gyros\_arm\_z 1 0.0 50.0

- gyros\_forearm\_z 1 0.0 50.0

- magnet\_forearm\_z 1 0.0 50.0

- total\_accel\_dumbbell 1 0.0 50.0

- raw\_timestamp\_part\_1 1 0.0 50.0

- gyros\_forearm\_y 1 0.0 50.0

- magnet\_dumbbell\_x 1 0.0 50.0

- pitch\_arm 1 0.0 50.0

- magnet\_arm\_y 1 0.0 50.0

- accel\_arm\_y 1 0.0 50.0

<none> 0.0 52.0

- num\_window 1 1141.6 1191.6

Step: AIC=50

classe ~ raw\_timestamp\_part\_1 + num\_window + roll\_belt + total\_accel\_belt +

magnet\_belt\_z + pitch\_arm + total\_accel\_arm + gyros\_arm\_z +

accel\_arm\_x + accel\_arm\_y + accel\_arm\_z + magnet\_arm\_y +

total\_accel\_dumbbell + gyros\_dumbbell\_z + accel\_dumbbell\_x +

magnet\_dumbbell\_x + pitch\_forearm + gyros\_forearm\_y + gyros\_forearm\_z +

accel\_forearm\_x + accel\_forearm\_y + accel\_forearm\_z + magnet\_forearm\_x +

magnet\_forearm\_z

Df Deviance AIC

- accel\_forearm\_z 1 0.0 48.0

- magnet\_belt\_z 1 0.0 48.0

- total\_accel\_belt 1 0.0 48.0

- accel\_forearm\_y 1 0.0 48.0

- gyros\_dumbbell\_z 1 0.0 48.0

- accel\_dumbbell\_x 1 0.0 48.0

- accel\_forearm\_x 1 0.0 48.0

- total\_accel\_arm 1 0.0 48.0

- roll\_belt 1 0.0 48.0

- magnet\_forearm\_x 1 0.0 48.0

- pitch\_forearm 1 0.0 48.0

- magnet\_forearm\_z 1 0.0 48.0

- gyros\_forearm\_z 1 0.0 48.0

- total\_accel\_dumbbell 1 0.0 48.0

- raw\_timestamp\_part\_1 1 0.0 48.0

- accel\_arm\_z 1 0.0 48.0

- gyros\_arm\_z 1 0.0 48.0

- gyros\_forearm\_y 1 0.0 48.0

- magnet\_dumbbell\_x 1 0.0 48.0

- magnet\_arm\_y 1 0.0 48.0

- pitch\_arm 1 0.0 48.0

- accel\_arm\_y 1 0.0 48.0

- accel\_arm\_x 1 0.0 48.0

<none> 0.0 50.0

- num\_window 1 1156.8 1204.8

Step: AIC=48

classe ~ raw\_timestamp\_part\_1 + num\_window + roll\_belt + total\_accel\_belt +

magnet\_belt\_z + pitch\_arm + total\_accel\_arm + gyros\_arm\_z +

accel\_arm\_x + accel\_arm\_y + accel\_arm\_z + magnet\_arm\_y +

total\_accel\_dumbbell + gyros\_dumbbell\_z + accel\_dumbbell\_x +

magnet\_dumbbell\_x + pitch\_forearm + gyros\_forearm\_y + gyros\_forearm\_z +

accel\_forearm\_x + accel\_forearm\_y + magnet\_forearm\_x + magnet\_forearm\_z

Df Deviance AIC

- total\_accel\_belt 1 0.0 46.0

- accel\_forearm\_y 1 0.0 46.0

- gyros\_dumbbell\_z 1 0.0 46.0

- magnet\_belt\_z 1 0.0 46.0

- total\_accel\_arm 1 0.0 46.0

- roll\_belt 1 0.0 46.0

- accel\_dumbbell\_x 1 0.0 46.0

- pitch\_forearm 1 0.0 46.0

- accel\_forearm\_x 1 0.0 46.0

- magnet\_forearm\_x 1 0.0 46.0

- magnet\_forearm\_z 1 0.0 46.0

- total\_accel\_dumbbell 1 0.0 46.0

- gyros\_forearm\_z 1 0.0 46.0

- accel\_arm\_z 1 0.0 46.0

- gyros\_forearm\_y 1 0.0 46.0

- gyros\_arm\_z 1 0.0 46.0

- magnet\_dumbbell\_x 1 0.0 46.0

- magnet\_arm\_y 1 0.0 46.0

- pitch\_arm 1 0.0 46.0

- accel\_arm\_y 1 0.0 46.0

- accel\_arm\_x 1 0.0 46.0

- raw\_timestamp\_part\_1 1 0.0 46.0

<none> 0.0 48.0

- num\_window 1 1220.2 1266.2

Step: AIC=46

classe ~ raw\_timestamp\_part\_1 + num\_window + roll\_belt + magnet\_belt\_z +

pitch\_arm + total\_accel\_arm + gyros\_arm\_z + accel\_arm\_x +

accel\_arm\_y + accel\_arm\_z + magnet\_arm\_y + total\_accel\_dumbbell +

gyros\_dumbbell\_z + accel\_dumbbell\_x + magnet\_dumbbell\_x +

pitch\_forearm + gyros\_forearm\_y + gyros\_forearm\_z + accel\_forearm\_x +

accel\_forearm\_y + magnet\_forearm\_x + magnet\_forearm\_z

Df Deviance AIC

- magnet\_belt\_z 1 0.0 44.0

- accel\_forearm\_y 1 0.0 44.0

- gyros\_dumbbell\_z 1 0.0 44.0

- roll\_belt 1 0.0 44.0

- total\_accel\_arm 1 0.0 44.0

- pitch\_forearm 1 0.0 44.0

- accel\_forearm\_x 1 0.0 44.0

- accel\_dumbbell\_x 1 0.0 44.0

- magnet\_forearm\_x 1 0.0 44.0

- magnet\_forearm\_z 1 0.0 44.0

- total\_accel\_dumbbell 1 0.0 44.0

- gyros\_forearm\_z 1 0.0 44.0

- accel\_arm\_z 1 0.0 44.0

- gyros\_arm\_z 1 0.0 44.0

- magnet\_dumbbell\_x 1 0.0 44.0

- gyros\_forearm\_y 1 0.0 44.0

- pitch\_arm 1 0.0 44.0

- magnet\_arm\_y 1 0.0 44.0

- accel\_arm\_y 1 0.0 44.0

- accel\_arm\_x 1 0.0 44.0

- raw\_timestamp\_part\_1 1 0.0 44.0

<none> 0.0 46.0

- num\_window 1 1270.6 1314.6

Step: AIC=44

classe ~ raw\_timestamp\_part\_1 + num\_window + roll\_belt + pitch\_arm +

total\_accel\_arm + gyros\_arm\_z + accel\_arm\_x + accel\_arm\_y +

accel\_arm\_z + magnet\_arm\_y + total\_accel\_dumbbell + gyros\_dumbbell\_z +

accel\_dumbbell\_x + magnet\_dumbbell\_x + pitch\_forearm + gyros\_forearm\_y +

gyros\_forearm\_z + accel\_forearm\_x + accel\_forearm\_y + magnet\_forearm\_x +

magnet\_forearm\_z

Df Deviance AIC

- roll\_belt 1 0.00 42.00

- gyros\_dumbbell\_z 1 0.00 42.00

- accel\_forearm\_y 1 0.00 42.00

- total\_accel\_arm 1 0.00 42.00

- pitch\_forearm 1 0.00 42.00

- magnet\_forearm\_x 1 0.00 42.00

- accel\_forearm\_x 1 0.00 42.00

- accel\_dumbbell\_x 1 0.00 42.00

- magnet\_forearm\_z 1 0.00 42.00

- total\_accel\_dumbbell 1 0.00 42.00

- accel\_arm\_z 1 0.00 42.00

- gyros\_forearm\_z 1 0.00 42.00

- gyros\_arm\_z 1 0.00 42.00

- magnet\_dumbbell\_x 1 0.00 42.00

- pitch\_arm 1 0.00 42.00

- gyros\_forearm\_y 1 0.00 42.00

- magnet\_arm\_y 1 0.00 42.00

- accel\_arm\_y 1 0.00 42.00

- accel\_arm\_x 1 0.00 42.00

<none> 0.00 44.00

- raw\_timestamp\_part\_1 1 198.61 240.61

- num\_window 1 1505.12 1547.12

Step: AIC=42

classe ~ raw\_timestamp\_part\_1 + num\_window + pitch\_arm + total\_accel\_arm +

gyros\_arm\_z + accel\_arm\_x + accel\_arm\_y + accel\_arm\_z + magnet\_arm\_y +

total\_accel\_dumbbell + gyros\_dumbbell\_z + accel\_dumbbell\_x +

magnet\_dumbbell\_x + pitch\_forearm + gyros\_forearm\_y + gyros\_forearm\_z +

accel\_forearm\_x + accel\_forearm\_y + magnet\_forearm\_x + magnet\_forearm\_z

Df Deviance AIC

- gyros\_dumbbell\_z 1 0.00 40.00

- total\_accel\_arm 1 0.00 40.00

- accel\_forearm\_y 1 0.00 40.00

- accel\_dumbbell\_x 1 0.00 40.00

- pitch\_forearm 1 0.00 40.00

- total\_accel\_dumbbell 1 0.00 40.00

- accel\_forearm\_x 1 0.00 40.00

- magnet\_forearm\_x 1 0.00 40.00

- magnet\_forearm\_z 1 0.00 40.00

- gyros\_forearm\_z 1 0.00 40.00

- accel\_arm\_z 1 0.00 40.00

- gyros\_arm\_z 1 0.00 40.00

- pitch\_arm 1 0.00 40.00

- accel\_arm\_y 1 0.00 40.00

- gyros\_forearm\_y 1 0.00 40.00

- magnet\_arm\_y 1 0.00 40.00

- accel\_arm\_x 1 0.00 40.00

- magnet\_dumbbell\_x 1 0.00 40.00

<none> 0.00 42.00

- raw\_timestamp\_part\_1 1 262.96 302.96

- num\_window 1 1799.43 1839.43

Step: AIC=40

classe ~ raw\_timestamp\_part\_1 + num\_window + pitch\_arm + total\_accel\_arm +

gyros\_arm\_z + accel\_arm\_x + accel\_arm\_y + accel\_arm\_z + magnet\_arm\_y +

total\_accel\_dumbbell + accel\_dumbbell\_x + magnet\_dumbbell\_x +

pitch\_forearm + gyros\_forearm\_y + gyros\_forearm\_z + accel\_forearm\_x +

accel\_forearm\_y + magnet\_forearm\_x + magnet\_forearm\_z

Df Deviance AIC

- accel\_forearm\_y 1 0.00 38.00

- total\_accel\_arm 1 0.00 38.00

- pitch\_forearm 1 0.00 38.00

- accel\_forearm\_x 1 0.00 38.00

- magnet\_forearm\_x 1 0.00 38.00

- total\_accel\_dumbbell 1 0.00 38.00

- gyros\_forearm\_z 1 0.00 38.00

- accel\_dumbbell\_x 1 0.00 38.00

- accel\_arm\_z 1 0.00 38.00

- gyros\_arm\_z 1 0.00 38.00

- magnet\_forearm\_z 1 0.00 38.00

- pitch\_arm 1 0.00 38.00

- accel\_arm\_y 1 0.00 38.00

- gyros\_forearm\_y 1 0.00 38.00

- magnet\_arm\_y 1 0.00 38.00

- accel\_arm\_x 1 0.00 38.00

- magnet\_dumbbell\_x 1 0.00 38.00

<none> 0.00 40.00

- raw\_timestamp\_part\_1 1 263.08 301.08

- num\_window 1 1799.89 1837.89

Step: AIC=38

classe ~ raw\_timestamp\_part\_1 + num\_window + pitch\_arm + total\_accel\_arm +

gyros\_arm\_z + accel\_arm\_x + accel\_arm\_y + accel\_arm\_z + magnet\_arm\_y +

total\_accel\_dumbbell + accel\_dumbbell\_x + magnet\_dumbbell\_x +

pitch\_forearm + gyros\_forearm\_y + gyros\_forearm\_z + accel\_forearm\_x +

magnet\_forearm\_x + magnet\_forearm\_z

Df Deviance AIC

- total\_accel\_arm 1 0.00 36.00

- pitch\_forearm 1 0.00 36.00

- gyros\_forearm\_z 1 0.00 36.00

- total\_accel\_dumbbell 1 0.00 36.00

- accel\_dumbbell\_x 1 0.00 36.00

- accel\_arm\_z 1 0.00 36.00

- magnet\_forearm\_z 1 0.00 36.00

- accel\_forearm\_x 1 0.00 36.00

- gyros\_arm\_z 1 0.00 36.00

- magnet\_forearm\_x 1 0.00 36.00

- accel\_arm\_y 1 0.00 36.00

- pitch\_arm 1 0.00 36.00

- magnet\_arm\_y 1 0.00 36.00

- gyros\_forearm\_y 1 0.00 36.00

- accel\_arm\_x 1 0.00 36.00

- magnet\_dumbbell\_x 1 0.00 36.00

<none> 0.00 38.00

- raw\_timestamp\_part\_1 1 304.28 340.28

- num\_window 1 1952.44 1988.44

Step: AIC=36

classe ~ raw\_timestamp\_part\_1 + num\_window + pitch\_arm + gyros\_arm\_z +

accel\_arm\_x + accel\_arm\_y + accel\_arm\_z + magnet\_arm\_y +

total\_accel\_dumbbell + accel\_dumbbell\_x + magnet\_dumbbell\_x +

pitch\_forearm + gyros\_forearm\_y + gyros\_forearm\_z + accel\_forearm\_x +

magnet\_forearm\_x + magnet\_forearm\_z

Df Deviance AIC

- accel\_arm\_z 1 0.00 34.00

- total\_accel\_dumbbell 1 0.00 34.00

- accel\_dumbbell\_x 1 0.00 34.00

- accel\_forearm\_x 1 0.00 34.00

- gyros\_arm\_z 1 0.00 34.00

- magnet\_forearm\_z 1 0.00 34.00

- gyros\_forearm\_z 1 0.00 34.00

- accel\_arm\_y 1 0.00 34.00

- magnet\_forearm\_x 1 0.00 34.00

- pitch\_forearm 1 0.00 34.00

- pitch\_arm 1 0.00 34.00

- magnet\_arm\_y 1 0.00 34.00

- gyros\_forearm\_y 1 0.00 34.00

- magnet\_dumbbell\_x 1 0.00 34.00

- accel\_arm\_x 1 0.00 34.00

<none> 0.00 36.00

- raw\_timestamp\_part\_1 1 363.71 397.71

- num\_window 1 2159.60 2193.60

Step: AIC=34

classe ~ raw\_timestamp\_part\_1 + num\_window + pitch\_arm + gyros\_arm\_z +

accel\_arm\_x + accel\_arm\_y + magnet\_arm\_y + total\_accel\_dumbbell +

accel\_dumbbell\_x + magnet\_dumbbell\_x + pitch\_forearm + gyros\_forearm\_y +

gyros\_forearm\_z + accel\_forearm\_x + magnet\_forearm\_x + magnet\_forearm\_z

Df Deviance AIC

- gyros\_arm\_z 1 0.00 32.00

- accel\_arm\_y 1 0.00 32.00

- magnet\_forearm\_x 1 0.00 32.00

- gyros\_forearm\_z 1 0.00 32.00

- pitch\_forearm 1 0.00 32.00

- accel\_forearm\_x 1 0.00 32.00

- magnet\_forearm\_z 1 0.00 32.00

- accel\_dumbbell\_x 1 0.00 32.00

- total\_accel\_dumbbell 1 0.00 32.00

- pitch\_arm 1 0.00 32.00

- gyros\_forearm\_y 1 0.00 32.00

- magnet\_arm\_y 1 0.00 32.00

- magnet\_dumbbell\_x 1 0.00 32.00

- accel\_arm\_x 1 0.00 32.00

<none> 0.00 34.00

- raw\_timestamp\_part\_1 1 363.71 395.71

- num\_window 1 2226.35 2258.35

Step: AIC=32

classe ~ raw\_timestamp\_part\_1 + num\_window + pitch\_arm + accel\_arm\_x +

accel\_arm\_y + magnet\_arm\_y + total\_accel\_dumbbell + accel\_dumbbell\_x +

magnet\_dumbbell\_x + pitch\_forearm + gyros\_forearm\_y + gyros\_forearm\_z +

accel\_forearm\_x + magnet\_forearm\_x + magnet\_forearm\_z

Df Deviance AIC

- accel\_arm\_y 1 0.00 30.00

- magnet\_forearm\_z 1 0.00 30.00

- pitch\_forearm 1 0.00 30.00

- magnet\_forearm\_x 1 0.00 30.00

- accel\_dumbbell\_x 1 0.00 30.00

- accel\_forearm\_x 1 0.00 30.00

- total\_accel\_dumbbell 1 0.00 30.00

- pitch\_arm 1 0.00 30.00

- gyros\_forearm\_z 1 0.00 30.00

- gyros\_forearm\_y 1 0.00 30.00

- magnet\_arm\_y 1 0.00 30.00

- magnet\_dumbbell\_x 1 0.00 30.00

- accel\_arm\_x 1 0.00 30.00

<none> 0.00 32.00

- raw\_timestamp\_part\_1 1 411.68 441.68

- num\_window 1 2246.17 2276.17

Step: AIC=30

classe ~ raw\_timestamp\_part\_1 + num\_window + pitch\_arm + accel\_arm\_x +

magnet\_arm\_y + total\_accel\_dumbbell + accel\_dumbbell\_x +

magnet\_dumbbell\_x + pitch\_forearm + gyros\_forearm\_y + gyros\_forearm\_z +

accel\_forearm\_x + magnet\_forearm\_x + magnet\_forearm\_z

Df Deviance AIC

- magnet\_forearm\_z 1 0.0 28.0

- magnet\_forearm\_x 1 0.0 28.0

- accel\_forearm\_x 1 0.0 28.0

- total\_accel\_dumbbell 1 0.0 28.0

- pitch\_forearm 1 0.0 28.0

- gyros\_forearm\_z 1 0.0 28.0

- gyros\_forearm\_y 1 0.0 28.0

- magnet\_arm\_y 1 0.0 28.0

- pitch\_arm 1 0.0 28.0

- accel\_dumbbell\_x 1 0.0 28.0

- magnet\_dumbbell\_x 1 0.0 28.0

- accel\_arm\_x 1 0.0 28.0

<none> 0.0 30.0

- raw\_timestamp\_part\_1 1 453.4 481.4

- num\_window 1 2249.4 2277.4

Step: AIC=28

classe ~ raw\_timestamp\_part\_1 + num\_window + pitch\_arm + accel\_arm\_x +

magnet\_arm\_y + total\_accel\_dumbbell + accel\_dumbbell\_x +

magnet\_dumbbell\_x + pitch\_forearm + gyros\_forearm\_y + gyros\_forearm\_z +

accel\_forearm\_x + magnet\_forearm\_x

Df Deviance AIC

- magnet\_forearm\_x 1 0.00 26.00

- accel\_forearm\_x 1 0.00 26.00

- total\_accel\_dumbbell 1 0.00 26.00

- pitch\_forearm 1 0.00 26.00

- gyros\_forearm\_z 1 0.00 26.00

- gyros\_forearm\_y 1 0.00 26.00

- magnet\_arm\_y 1 0.00 26.00

- pitch\_arm 1 0.00 26.00

- accel\_dumbbell\_x 1 0.00 26.00

- magnet\_dumbbell\_x 1 0.00 26.00

<none> 0.00 28.00

- raw\_timestamp\_part\_1 1 512.71 538.71

- accel\_arm\_x 1 2234.71 2260.71

- num\_window 1 2687.05 2713.05

Step: AIC=26

classe ~ raw\_timestamp\_part\_1 + num\_window + pitch\_arm + accel\_arm\_x +

magnet\_arm\_y + total\_accel\_dumbbell + accel\_dumbbell\_x +

magnet\_dumbbell\_x + pitch\_forearm + gyros\_forearm\_y + gyros\_forearm\_z +

accel\_forearm\_x

Df Deviance AIC

- accel\_forearm\_x 1 0.00 24.00

- gyros\_forearm\_y 1 0.00 24.00

- pitch\_forearm 1 0.00 24.00

- total\_accel\_dumbbell 1 0.00 24.00

- gyros\_forearm\_z 1 0.00 24.00

- magnet\_arm\_y 1 0.00 24.00

- pitch\_arm 1 0.00 24.00

- magnet\_dumbbell\_x 1 0.00 24.00

- accel\_arm\_x 1 0.00 24.00

- accel\_dumbbell\_x 1 0.00 24.00

<none> 0.00 26.00

- raw\_timestamp\_part\_1 1 550.76 574.76

- num\_window 1 2702.16 2726.16

Step: AIC=24

classe ~ raw\_timestamp\_part\_1 + num\_window + pitch\_arm + accel\_arm\_x +

magnet\_arm\_y + total\_accel\_dumbbell + accel\_dumbbell\_x +

magnet\_dumbbell\_x + pitch\_forearm + gyros\_forearm\_y + gyros\_forearm\_z

Df Deviance AIC

- gyros\_forearm\_y 1 0.0 22.0

- total\_accel\_dumbbell 1 0.0 22.0

- gyros\_forearm\_z 1 0.0 22.0

- magnet\_arm\_y 1 0.0 22.0

- pitch\_arm 1 0.0 22.0

- accel\_dumbbell\_x 1 0.0 22.0

- magnet\_dumbbell\_x 1 0.0 22.0

- accel\_arm\_x 1 0.0 22.0

- pitch\_forearm 1 0.0 22.0

<none> 0.0 24.0

- raw\_timestamp\_part\_1 1 631.1 653.1

- num\_window 1 2752.0 2774.0

Step: AIC=22

classe ~ raw\_timestamp\_part\_1 + num\_window + pitch\_arm + accel\_arm\_x +

magnet\_arm\_y + total\_accel\_dumbbell + accel\_dumbbell\_x +

magnet\_dumbbell\_x + pitch\_forearm + gyros\_forearm\_z

Df Deviance AIC

- gyros\_forearm\_z 1 0.00 20.00

- total\_accel\_dumbbell 1 0.00 20.00

- pitch\_arm 1 0.00 20.00

- accel\_dumbbell\_x 1 0.00 20.00

- magnet\_dumbbell\_x 1 0.00 20.00

- magnet\_arm\_y 1 0.00 20.00

- pitch\_forearm 1 0.00 20.00

- accel\_arm\_x 1 0.00 20.00

<none> 0.00 22.00

- raw\_timestamp\_part\_1 1 636.19 656.19

- num\_window 1 2797.77 2817.77

Step: AIC=20

classe ~ raw\_timestamp\_part\_1 + num\_window + pitch\_arm + accel\_arm\_x +

magnet\_arm\_y + total\_accel\_dumbbell + accel\_dumbbell\_x +

magnet\_dumbbell\_x + pitch\_forearm

Df Deviance AIC

- pitch\_arm 1 0.00 18.00

- total\_accel\_dumbbell 1 0.00 18.00

- magnet\_dumbbell\_x 1 0.00 18.00

- magnet\_arm\_y 1 0.00 18.00

- pitch\_forearm 1 0.00 18.00

- accel\_arm\_x 1 0.00 18.00

- accel\_dumbbell\_x 1 0.00 18.00

<none> 0.00 20.00

- raw\_timestamp\_part\_1 1 636.38 654.38

- num\_window 1 2830.14 2848.14

Step: AIC=18

classe ~ raw\_timestamp\_part\_1 + num\_window + accel\_arm\_x + magnet\_arm\_y +

total\_accel\_dumbbell + accel\_dumbbell\_x + magnet\_dumbbell\_x +

pitch\_forearm

Df Deviance AIC

- total\_accel\_dumbbell 1 0.00 16.00

- accel\_dumbbell\_x 1 0.00 16.00

- magnet\_dumbbell\_x 1 0.00 16.00

- accel\_arm\_x 1 0.00 16.00

- pitch\_forearm 1 0.00 16.00

- magnet\_arm\_y 1 0.00 16.00

<none> 0.00 18.00

- raw\_timestamp\_part\_1 1 779.63 795.63

- num\_window 1 2972.84 2988.84

Step: AIC=16

classe ~ raw\_timestamp\_part\_1 + num\_window + accel\_arm\_x + magnet\_arm\_y +

accel\_dumbbell\_x + magnet\_dumbbell\_x + pitch\_forearm

Df Deviance AIC

- accel\_dumbbell\_x 1 0.0 14.0

- magnet\_dumbbell\_x 1 0.0 14.0

- magnet\_arm\_y 1 0.0 14.0

- accel\_arm\_x 1 0.0 14.0

- pitch\_forearm 1 0.0 14.0

<none> 0.0 16.0

- raw\_timestamp\_part\_1 1 1009.6 1023.6

- num\_window 1 2999.6 3013.6

Step: AIC=14

classe ~ raw\_timestamp\_part\_1 + num\_window + accel\_arm\_x + magnet\_arm\_y +

magnet\_dumbbell\_x + pitch\_forearm

Df Deviance AIC

- magnet\_dumbbell\_x 1 0.0 12.0

- magnet\_arm\_y 1 0.0 12.0

- pitch\_forearm 1 0.0 12.0

- accel\_arm\_x 1 0.0 12.0

<none> 0.0 14.0

- raw\_timestamp\_part\_1 1 2170.5 2182.5

- num\_window 1 3211.5 3223.5

Step: AIC=12

classe ~ raw\_timestamp\_part\_1 + num\_window + accel\_arm\_x + magnet\_arm\_y +

pitch\_forearm

Df Deviance AIC

- magnet\_arm\_y 1 0.0 10.0

- accel\_arm\_x 1 0.0 10.0

- pitch\_forearm 1 0.0 10.0

<none> 0.0 12.0

- raw\_timestamp\_part\_1 1 3282.6 3292.6

- num\_window 1 3437.9 3447.9

Step: AIC=10

classe ~ raw\_timestamp\_part\_1 + num\_window + accel\_arm\_x + pitch\_forearm

Df Deviance AIC

- accel\_arm\_x 1 0.0 8.0

- pitch\_forearm 1 0.0 8.0

<none> 0.0 10.0

- num\_window 1 3520.4 3528.4

- raw\_timestamp\_part\_1 1 4496.5 4504.5

Step: AIC=8

classe ~ raw\_timestamp\_part\_1 + num\_window + pitch\_forearm

Df Deviance AIC

- pitch\_forearm 1 0.0 6.0

<none> 0.0 8.0

- num\_window 1 3520.4 3526.4

- raw\_timestamp\_part\_1 1 4662.4 4668.4

Step: AIC=6

classe ~ raw\_timestamp\_part\_1 + num\_window

Df Deviance AIC

<none> 0.0 6.0

- num\_window 1 4449.3 4453.3

- raw\_timestamp\_part\_1 1 5138.0 5142.0

There were 50 or more warnings (use warnings() to see the first 50)

> summary(step\_fit)

Call:

glm(formula = classe ~ raw\_timestamp\_part\_1 + num\_window, family = binomial(l

ink = "logit"),

data = dataTrain)

Deviance Residuals:

Min 1Q Median 3Q Max

-2.304e-03 -2.000e-08 2.000e-08 2.000e-08 2.235e-03

Coefficients:

Estimate Std. Error z value Pr(>|z|)

(Intercept) 2.688e+08 9.192e+08 0.292 0.770

raw\_timestamp\_part\_1 -2.032e-01 6.947e-01 -0.292 0.770

num\_window 4.362e+01 1.477e+02 0.295 0.768

(Dispersion parameter for binomial family taken to be 1)

Null deviance: 5.1382e+03 on 4003 degrees of freedom

Residual deviance: 3.8673e-04 on 4001 degrees of freedom

AIC: 6.0004

Number of Fisher Scoring iterations: 25

> confint(step\_fit)

Waiting for profiling to be done...

2.5 % 97.5 %

(Intercept) 5.356253e+08 4.612380e+08

raw\_timestamp\_part\_1 -3.486092e-01 -4.048320e-01

num\_window 8.649066e+01 7.453712e+01

Warning messages:

1: glm.fit: fitted probabilities numerically 0 or 1 occurred

2: glm.fit: fitted probabilities numerically 0 or 1 occurred

3: glm.fit: fitted probabilities numerically 0 or 1 occurred

4: glm.fit: fitted probabilities numerically 0 or 1 occurred

5: glm.fit: fitted probabilities numerically 0 or 1 occurred

6: glm.fit: fitted probabilities numerically 0 or 1 occurred

7: glm.fit: fitted probabilities numerically 0 or 1 occurred

8: glm.fit: fitted probabilities numerically 0 or 1 occurred

9: glm.fit: fitted probabilities numerically 0 or 1 occurred

> #ANOVA on base model

> anova(fit,test = 'Chisq')

Analysis of Deviance Table

Model: binomial, link: logit

Response: classe

Terms added sequentially (first to last)

Df Deviance Resid. Df Resid. Dev Pr(>Chi)

NULL 4003 5138.2

raw\_timestamp\_part\_1 1 689.0 4002 4449.3 < 2.2e-16 \*\*\*

num\_window 1 4449.3 4001 0.0 < 2.2e-16 \*\*\*

---

Signif. codes: 0 ‘\*\*\*’ 0.001 ‘\*\*’ 0.01 ‘\*’ 0.05 ‘.’ 0.1 ‘ ’ 1

Warning message:

glm.fit: fitted probabilities numerically 0 or 1 occurred

>

> #plot the fitted model

> plot(fit$fitted.values)

> pred\_link <- predict(fit,newdata = dataTest,type = 'link')

Warning message:

In predict.lm(object, newdata, se.fit, scale = 1, type = ifelse(type == :

prediction from a rank-deficient fit may be misleading

>

> #check for multicollinearity

> library(car)

Loading required package: carData

Attaching package: ‘car’

The following object is masked from ‘package:arules’:

recode

> vif(fit)

Error in vif.default(fit) : there are aliased coefficients in the model

> vif(step\_fit)

raw\_timestamp\_part\_1 num\_window

67.38515 67.38515

> library(caret)

> #with default prob cut 0.50

> dataTest$pred\_classe <- ifelse(pred<0.7,'yes','no')

>

> table(dataTest$pred\_classe,dataTest$classe)

A B C D E

no 0 0 19 0 0

yes 0 0 1 0 0

>

#training split of churn classes

> round(table(dataTrain$classe)/nrow(dataTrain),2)\*100

A B C D E

34 23 2 7 34

> # test split of churn classes

> round(table(dataTest$classe)/nrow(dataTest),2)\*100

A B C D E

0 0 100 0 0

> #predicted split of churn classes

> round(table(dataTest$pred\_classe)/nrow(dataTest),2)\*100

no yes

95 5

Confusion Matrix and Statistics

Reference

Prediction A B C D E

A 0 0 0 0 0

B 0 0 0 0 0

C 0 0 20 0 0

D 0 0 0 0 0

E 0 0 0 0 0

Overall Statistics

Accuracy : 1

95% CI : (0.8316, 1)

No Information Rate : 1

P-Value [Acc > NIR] : 1

Kappa : NaN

Mcnemar's Test P-Value : NA

Statistics by Class:

Class: A Class: B Class: C Class: D Class: E

Sensitivity NA NA 1 NA NA

Specificity 1 1 NA 1 1

Pos Pred Value NA NA NA NA NA

Neg Pred Value NA NA NA NA NA

Prevalence 0 0 1 0 0

Detection Rate 0 0 1 0 0

Detection Prevalence 0 0 1 0 0

Balanced Accuracy NA NA NA NA NA

>

#how do we create a cross validation scheme

> control <- trainControl(method = 'repeatedcv',

+ number = 10,

+ repeats = 3)

> seed <-7

> metric <- 'Accuracy'

> set.seed(seed)

> fit\_default <- train(classe~.,

+ data = dataTrain,

+ method = 'glm',

+ metric = metric,

+ trControl = control)

Something is wrong; all the Accuracy metric values are missing:

Accuracy Kappa

Min. : NA Min. : NA

1st Qu.: NA 1st Qu.: NA

Median : NA Median : NA

Mean :NaN Mean :NaN

3rd Qu.: NA 3rd Qu.: NA

Max. : NA Max. : NA

NA's :1 NA's :1

Error: Stopping

In addition: Warning message:

In nominalTrainWorkflow(x = x, y = y, wts = weights, info = trainInfo, :

There were missing values in resampled performance measures.

> print(fit\_default)

Error in print(fit\_default) : object 'fit\_default' not found

>

> library(caret)

> varImp(step\_fit)

Overall

raw\_timestamp\_part\_1 0.2924915

num\_window 0.2953298

> varImp(fit\_default)

Error in varImp(fit\_default) : object 'fit\_default' not found

>

> library(devtools)

>

> install\_github("riv","tomasgreif")

Skipping install of 'woe' from a github remote, the SHA1 (43fcf268) has not c

hanged since last install.

Use `force = TRUE` to force installation

Warning message:

Username parameter is deprecated. Please use tomasgreif/riv

>

> install\_github("woe","tomasgreif")

Skipping install of 'woe' from a github remote, the SHA1 (43fcf268) has not c

hanged since last install.

Use `force = TRUE` to force installation

Warning message:

Username parameter is deprecated. Please use tomasgreif/woe

>

> library(woe)

>

> library(riv)

> iv\_df <- iv.mult(dataTrain, y="classe", summary=TRUE, verbose=TRUE)

Started processing of data frame: dataTrain

Calling iv.num for variable: user\_name

Building rpart model

Model finished

Sending model to tree parser

Rules parsed: 2

Mapping nodes to data

SQL Merge

DF Merge

Calling iv.str for nodes

Error in iv.str(df, "tmp\_iv\_calc\_label", y) : Not a binary outcome

> iv\_df

Error: object 'iv\_df' not found

>

> iv <- iv.mult(dataTrain, y="classe", summary=FALSE, verbose=TRUE)

Started processing of data frame: dataTrain

Calling iv.num for variable: user\_name

Building rpart model

Model finished

Sending model to tree parser

Rules parsed: 2

Mapping nodes to data

SQL Merge

DF Merge

Calling iv.str for nodes

Error in iv.str(df, "tmp\_iv\_calc\_label", y) : Not a binary outcome

> # Plot information value summary

>

> iv.plot.summary(iv\_df)

Error in ggplot(data = iv) : object 'iv\_df' not found