

Submission 13

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ADA

Load and Source

```
source("../helpers/predictions.R")
```

```
library(caret)
```

```
## Loading required package: lattice  
## Loading required package: ggplot2
```

```
library(ada)
```

```
## Loading required package: rpart
```

```
train <- read.csv("../data/original/training.csv")  
test <- read.csv("../data/original/test.csv")
```

Data Processing

```
set.seed(1111)  
training.indices <- createDataPartition(train$Label, p=0.6, list=F)  
training <- train[training.indices,]  
validation <- train[-training.indices,]
```

Models

```
set.seed(646)  
predictors <- training[,setdiff(names(training),c("EventId","Label","Weight"))]  
ada.fit <- ada(x=predictors, y=training$Label, verbose=T)
```

```
load("RData/adafit.RData")
```

```
pred.val <- predict(ada.fit, validation[,setdiff(names(training),c("EventId","Weight"))])  
confusionMatrix(pred.val, validation$Label)
```

```
## Warning: NAs produced by integer overflow
```



```
sub.test <- test[,setdiff(names(test), c("EventId","Weight"))]  
pred <- predict(adafull.fit, sub.test, type=c("probs"))
```

```
head(pred)
```

```
##           [,1]      [,2]  
## [1,] 0.9242 0.07581  
## [2,] 0.8430 0.15705  
## [3,] 0.4574 0.54263  
## [4,] 0.1393 0.86067  
## [5,] 0.9094 0.09058  
## [6,] 0.8792 0.12076
```

```
pred <- as.data.frame(pred)  
names(pred) <- c("b","s")
```

```
pred.final <- PrepPrediction(pred, test)  
WriteSubmission(pred.final, 13)
```

Results

2.66179