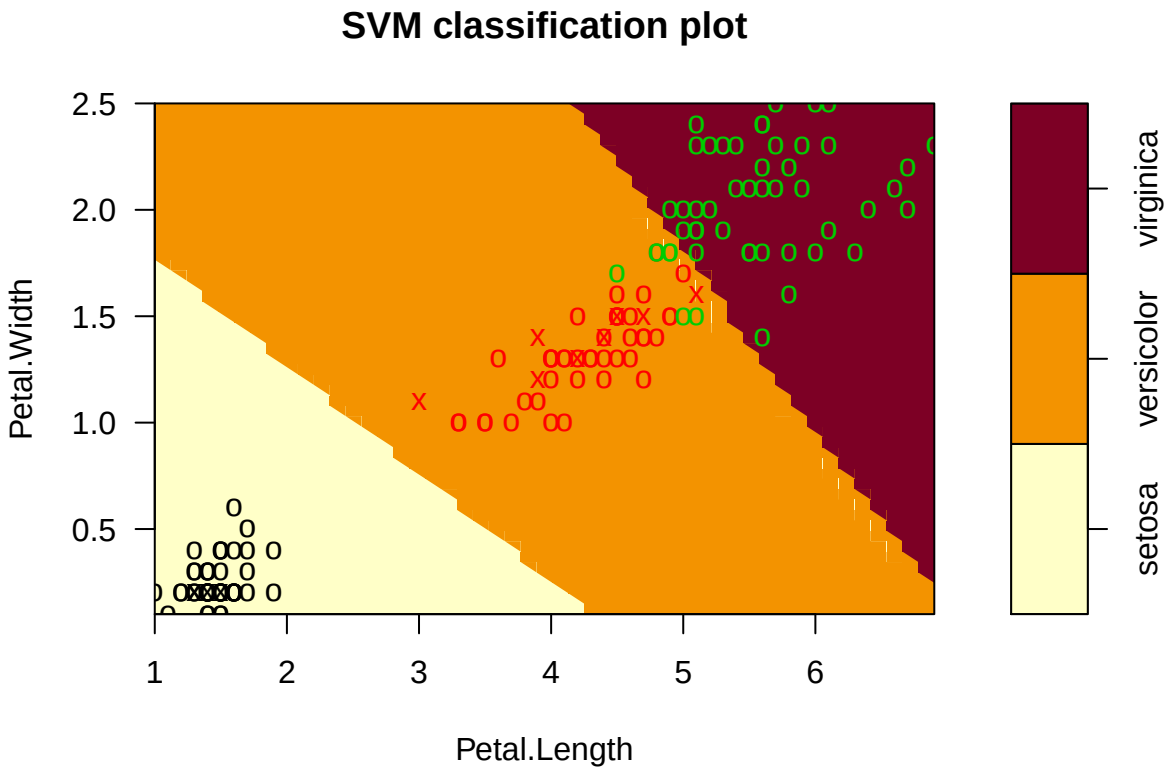
SVM Classification on the Iris Data

Load iris data and divide into train and test sets

```
set.seed(1234)
i <- sample(150, 100, replace=TRUE)
train <- iris[i,]
test <- iris[-i,]
```

Run a linear SVM

```
library(e1071)
svm1 <- svm(Species~., data=train, kernel="linear", cost=10, scale=TRUE)
plot(svm1, iris, Petal.Width ~ Petal.Length,
     slice = list(Sepal.Width = 3, Sepal.Length = 4))
```



Evaluate on the test data

```
pred <- predict(svm1, newdata=test)
table(pred, test$Species)
```

```
##
## pred         setosa versicolor virginica
##   setosa         27          0         0
##   versicolor      0         22         0
##   virginica       0          5        25
```

```r
mean(pred==test$Species)
```

```
## [1] 0.9367089
```