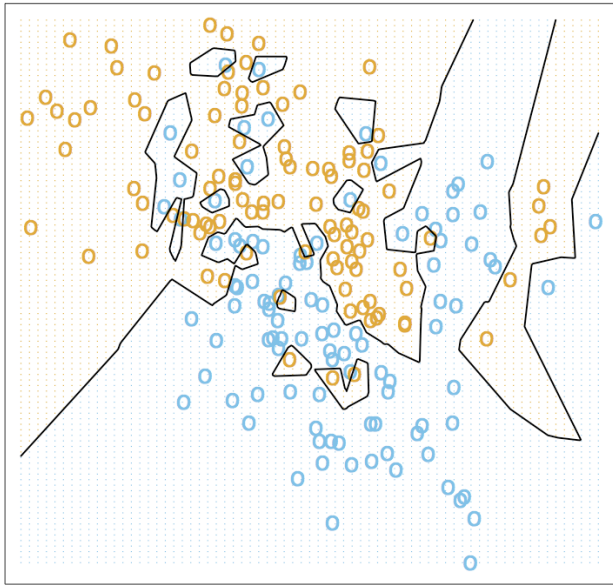


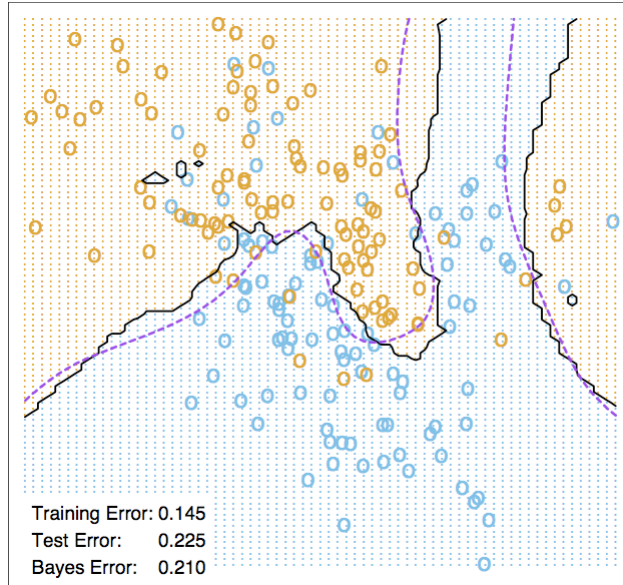
# CS194 Fall 2011 Lecture 10

## Instance-Based Methods

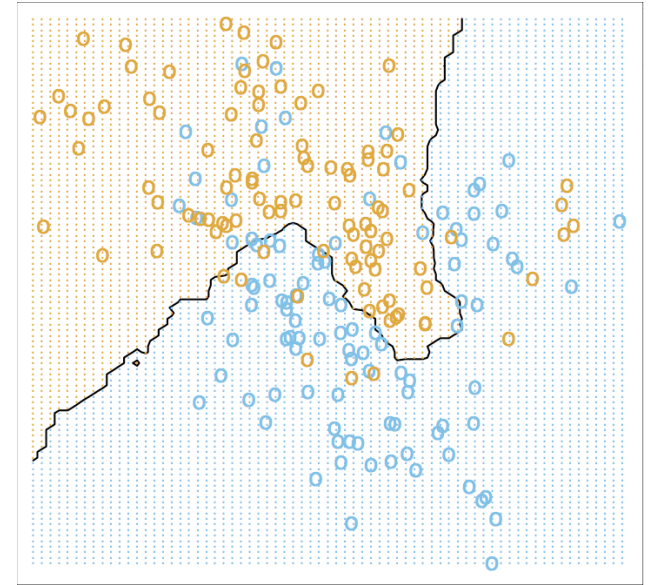
# Choosing $k$ in $k$ -nearest-neighbors



$k=1$

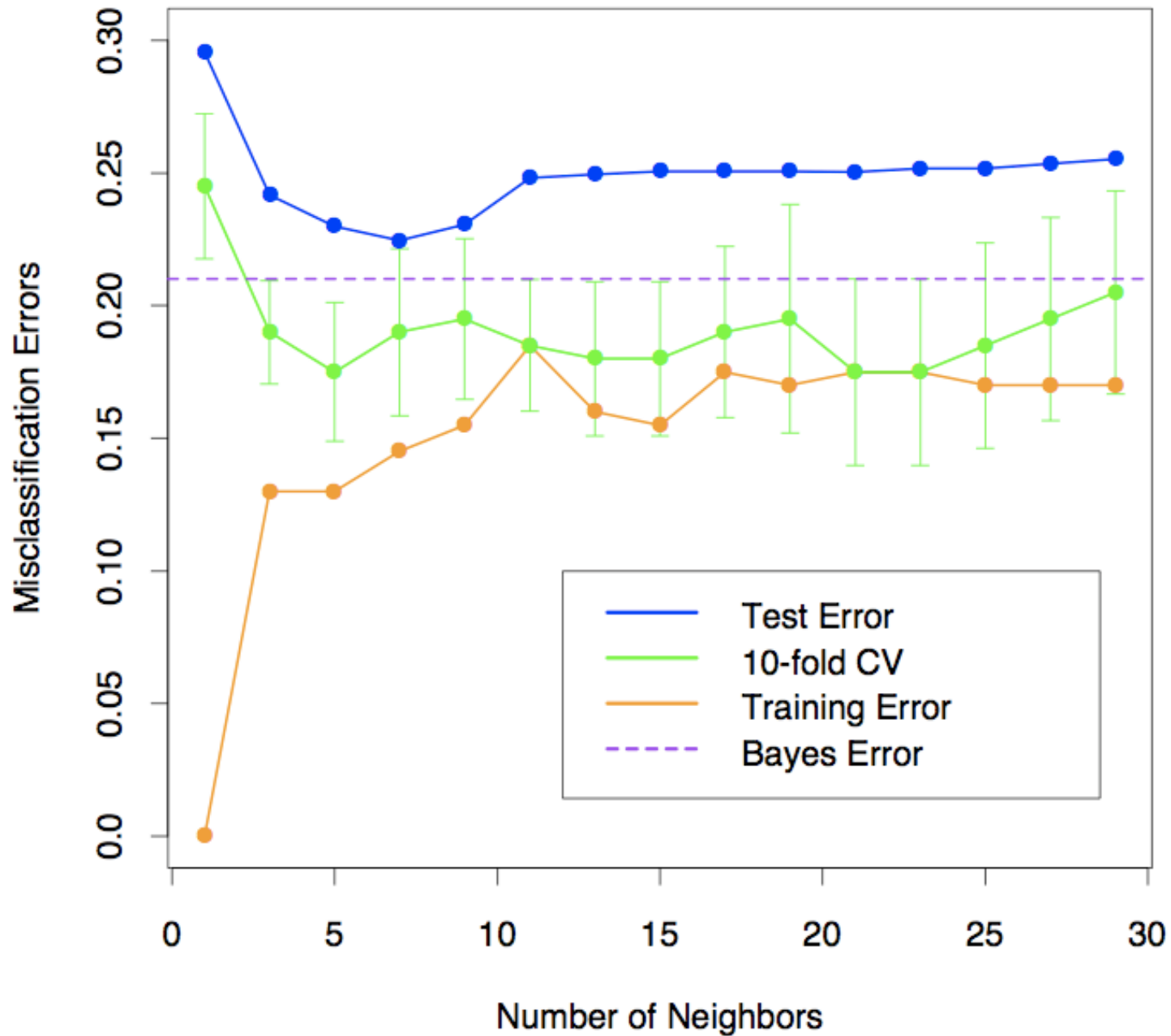


$k=7$

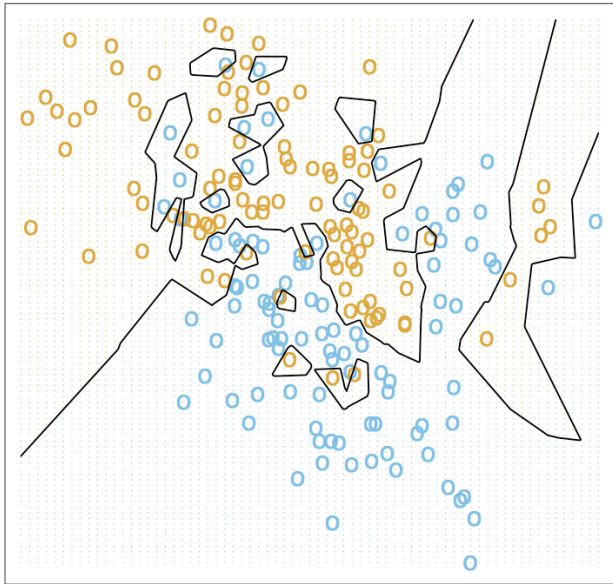


$k=15$

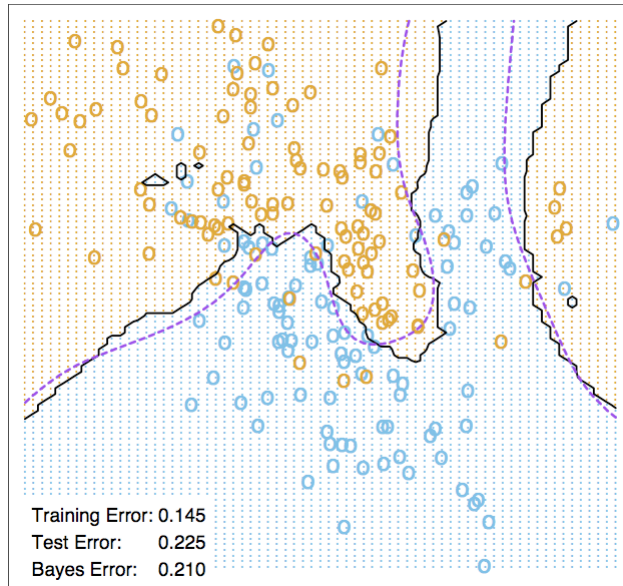
# Cross-validation



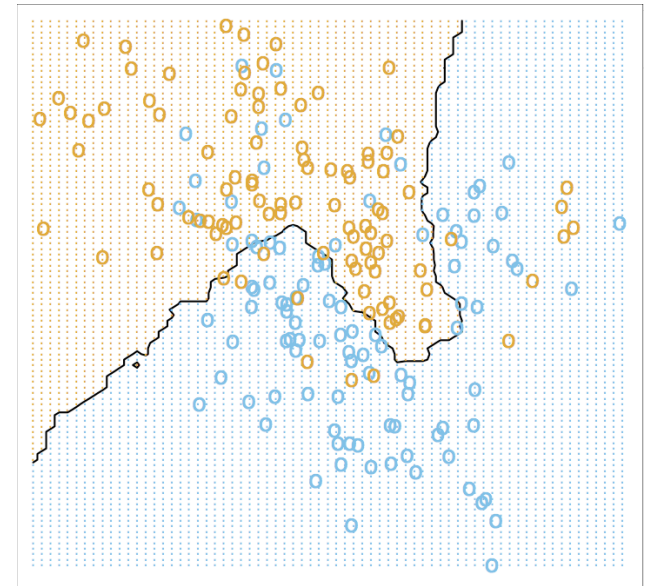
# Choosing $k$ in $k$ -nearest-neighbors



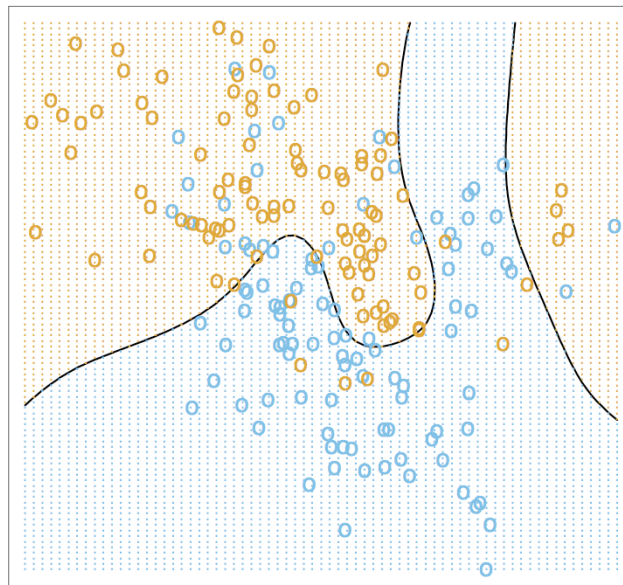
$k=1$



$k=7$



$k=15$



Bayes-optimal boundary  
given true generating model