Lecture 7:
Simple Classifier (KNN)

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CLASS.VISION
The k-Nearest Neighbor Classifier

• Objectives:
  
  By the end of this lesson, you will:
  
  – Have an understanding of the k-Nearest Neighbor classifier.
  
  – Know how to apply the k-Nearest Neighbor classifier to image datasets.
  
  – Understand how the value of $k$ impacts classifier performance.
Example of 3 clusters in a dataset
1-Nearest Neighbor
3-Nearest Neighbor
Voronoi Diagram

• Decision surface formed by the training examples
• https://www.csee.umbc.edu/courses/671/fall01/class-notes/k-nn.ppt
• https://gurus.pyimagesearch.com/lesson-sample-k-nearest-neighbor-classification/