

Concept Question 11-7: What is the K-Means Algorithm for?

It clusters the points representing training images into Voronoi sets (decision regions representing each image class). Each Voronoi set consists of the set of points closest to its centroid. To classify a new image, project it onto the reduced dimensionality set (here, the planes in Figs. 11-12 and 11-13) and see into which Voronoi set (image class) it lies.