Unsupervised Learning

Quiz, 5 questions

5/5 points (100%)

Congratulations! You passed!

Next Item

1 / 1 points

1. For which of the following tasks might K-means clustering be a suitable algorithm? Select all that apply.

1 / 1 points

2. Suppose we have three cluster centroids $\mu_1 = \begin{bmatrix} 1 \\ 2 \end{bmatrix}$, $\mu_2 = \begin{bmatrix} -3 \\ 0 \end{bmatrix}$ and $\mu_3 = \begin{bmatrix} 4 \\ 2 \end{bmatrix}$.

Furthermore, we have a training example $x^{(i)} = \begin{bmatrix} -2 \\ 1 \end{bmatrix}$. After a cluster assignment step, what will $c^{(i)}$ be?

1 / 1 points

3. K-means is an iterative algorithm, and two of the following steps are repeatedly carried out in its inner-loop. Which two?

1 / 1 points

4. Suppose you have an unlabeled dataset $\{x^{(1)}, \ldots, x^{(m)}\}$. You run K-means with 50 different random

initializations, and obtain 50 different clusterings of the

data. What is the recommended way for choosing which one of

these 50 clusterings to use?

1 / 1 points

5. Which of the following statements are true? Select all that apply.