



MITx 6.86x

Machine Learning with Python-From Linear Models to Deep Learning[Course](#)[Progress](#)[Dates](#)[Discussion](#)[Resources](#)[Home](#) [Course](#) / [Unit 4. Unsupervised Learning \(2 weeks\)](#) / [Lecture 13. Clustering 1](#)[< Previous](#)

7. The K-Means Algorithm: The Big Picture

[Bookmark this page](#)

Exercises due Apr 19, 2023 08:59 -03 Completed

The K-Means Algorithm: The Big Picture



Video

[!\[\]\(de95854c7ee024cfadc48187bbb781b2_img.jpg\) Download video file](#)

Transcripts

[!\[\]\(6059a5aa8b4ca7bb793408023d6c6e42_img.jpg\) Download SubRip \(.srt\) file](#)[!\[\]\(c50c8b7b2cc2cf9ff925edec0ee94c0d_img.jpg\) Download Text \(.txt\) file](#)

The K-Means Algorithm: Step-by-Step

2/2 points (graded)

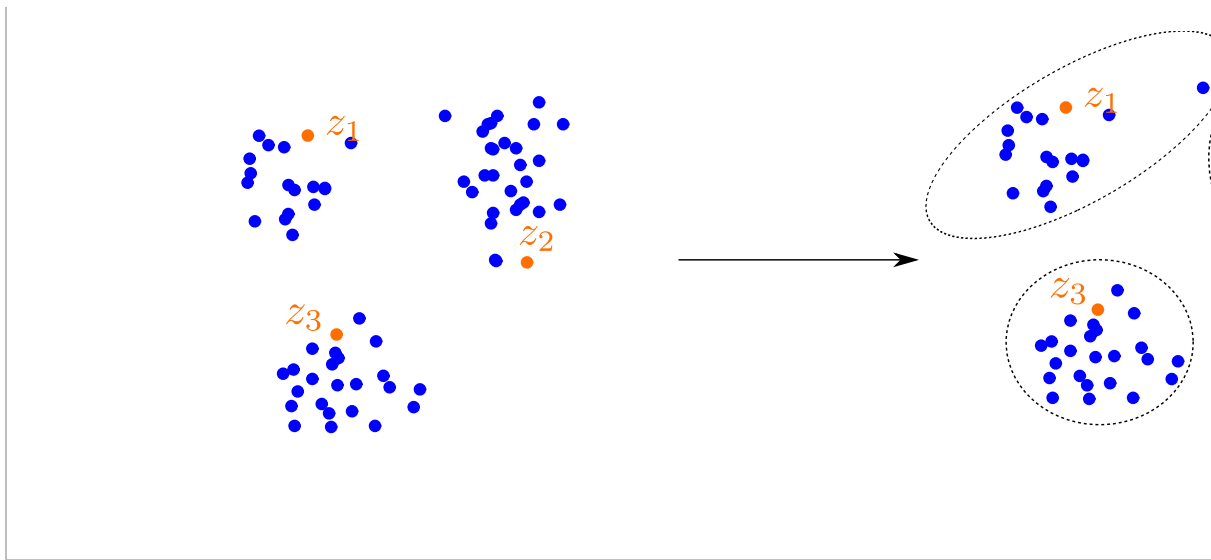
In the above lecture, given a set of feature vectors

$$S_n = \{x^{(i)} | i = 1, \dots, n\}$$

and the number of clusters K , we saw that we can use the K-Means algorithm to find n assignments C_1, \dots, C_K and the representatives of each of the K clusters z_1, \dots, z_K given as follows:

1. Randomly select z_1, \dots, z_K

2. Iterate



Which is it?

☐ Step 1

☒ Step 2.1

☐ Step 2.2



2. The fo

[< Previous](#)

[Next >](#)



edX

[About](#)

[Affiliates](#)

[edX for Business](#)

[Open edX](#)

[Careers](#)

[News](#)

Legal

[Terms of Service & Honor Code](#)

[Privacy Policy](#)

💬 why can't we use gradient descent on the cost function?
Like we did with Neural networks and Classifiers



© 2023 edX LLC. All rights reserved.

深圳市恒宇博科技有限公司 [粤ICP备17044299号-2](#)