edX

Course > <u>weeks</u>) <u>Unit 4 Unsupervised Learning (2</u> > <u>Lecture 15. Generative Models</u> > 2. Generative vs Discriminative models

> **Audit Access Expires May 11, 2020**
> You lose all access to this course, including your progress, on May 11, 2020.

2. Generative vs Discriminative models

Generative vs. Discriminative models

Video
Download video file

Transcripts
Download SubRip (.srt) file
Download Text (.txt) file

Generative vs. Discriminative models

1/1 point (graded)
Which of the following option(s) is/are true about generative and discriminative models? Choose all that apply from the statements below:

- [x] Generative models model the probability distribution of each class

- [ ] Discriminative models model the probability distribution of each class

- [ ] Generative models learn the decision boundary between the classes

- [x] Discriminative models learn the decision boundary between the classes

✔

Solution:

Generative models work by explicitly modelling the probability distribution of each of the individual classes in the training data. For instance, Gaussian generative models fit a Gaussian probability distribution to the training data in order to estimate the probability of a new data point belonging to different classes during prediction.

Discriminative models learn explicit decision boundary between classes. For instance, SVM classifier which is a discriminative model learns its decision boundary by minimizing the distance between training data points and a learned decision boundary.

Submit   You have used 1 of 2 attempts

ⓘ   Answers are displayed within the problem

Discussion

Hide Discussion

Topic: Unit 4 Unsupervised Learning (2 weeks) :Lecture 15.
Generative Models / 2. Generative vs Discriminative models

Add a Post

Show all posts	by recent activity
There are no posts in this topic yet.	
✖	