

Session 3 Quiz

Due No due date **Points** 100 **Questions** 11 **Time Limit** None

This quiz is currently locked.

Attempt History

	Attempt	Time	Score
LATEST	Attempt 1	3 minutes	80.71 out of 100

Score for this quiz: **80.71** out of 100

Submitted Aug 3, 2019 at 5:47pm

This attempt took 3 minutes.

Question 1

5 / 5 pts

What is the meaning of adversarial in GANs?

Correct!

- ☒ Two network competing which each other
- ☐ Two network trying to work with bad inputs
- ☐ Two network trying to help each other directly

- ☐ One network trying to learn from the bad inputs of another network

Question 2**5 / 5 pts**

For a GAN converting Photos to EMOjis, what input is shared between G and D network?

Correct!

- ☒ Face
- ☐ Real Emoji
- ☐ Face & Amoji
- ☐ Generated Emoji

Question 3**5 / 5 pts**

For a GAN converting Photos to EMOjis, what is the input to the D network?

Correct!

- ☒ Face, Corresponding EMOji or Generated Emoji
- ☐ Real Emoji and Generated Emoji

☐ Face☐ Generated Emoji**Question 4****5 / 5 pts**

Which of the following networks cannot create a "diversified output"?

Correct!☒ Auto Encoder☐ Variational AutoEncoder☐ GAN☐ VAE-GAN**Question 5****5 / 5 pts**

Function W can be G or D . If W is G , then D will be shown as V below, and vice versa.

Consider the loss below:

maximize ($\log(W(\text{real_image})) + \log(1 - W(V(\text{fake_image})))$)

What is W?

Correct!

☒ Discriminator

☐ Generator

Question 6

0 / 5 pts

Function W can be G or D. If W is G, then D will be shown as V below, and vice versa.

Consider the loss below:

minimize (- ($\log(W(V(\text{fake_image})))$))

What is W?

Correct Answer

☐ Discriminator

You Answered

☒ Generator

Question 7

25.71 / 30 pts

Select all which are true:

Correct!

☒ Discriminator should be trained before training Generator

Correct!

☒ Discriminator should be trained better initially, and then we should try and match D and G's performances

☐ Discriminator's architecture should be exactly opposite of Generator's architecture

Correct!

☒ There are infinite number of minimas for GANs

☐ If, by mistake, labels for Discriminator are reversed, vanilla GAN trained will act exactly as before

Correct!

☒ Random Vector input to the Generator Network can be controlled to control the output features

Correct Answer

☐
For a basic GAN, the Information Entropy of the D's output is less than the Information Entropy of the Input to G Network

☐ For the trained basic GAN, same random latent vector input can create different outputs

Correct!

☒ Mode collapse happens for a GAN when it generates only one of the possible classes

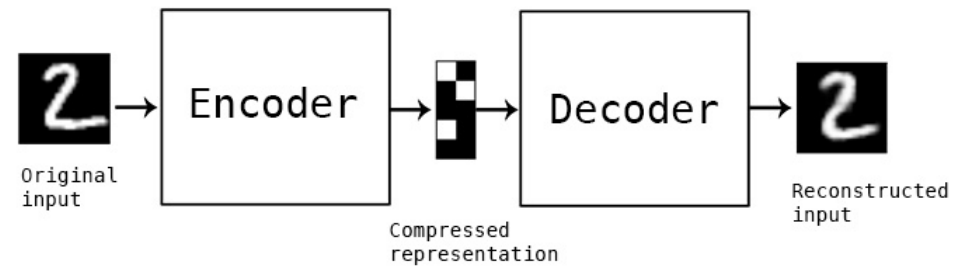
Correct!

☒ GANs are trained till G and D reaches a Nash Equilibrium

Question 8

0 / 5 pts

Consider an AutoEncoder.



If the Information Entropy (IE) of the input is equal to the Compressed Representation, then it is possible to reconstruct the input without error.

Correct Answer

☐ Yes

You Answered

☒ No

Question 9

10 / 10 pts

KL Divergence for Network A, B and C are 0.025, -1 and 1. Which is true?

☐ Network C is better than Network A

☒ Network A is a very good representation of the actual dataset.

☒ KLD calculated for network B is wrong.

Correct!

Correct!

☐ Network B is better A, and Network A is better than C

Question 10**5 / 5 pts**

In which GAN do we provide the label to both G and D?

Correct!

☒ CGAN

☐ ACGAN

☐ InfoGAN

☐ PixelGAN

Question 11**15 / 20 pts**

Select which all are true?

Correct!

☒ Out of CGAN and DCGAN, it is guaranteed that DCGAN is using convolutional layers

Correct!

☒ In case of CGAN label is provided to both G and D, however in ACGAN, label is not provided to both

Correct!

If, along with D and G, we have another network K, and we train this network K to predict the input to G, given G's output, we can make sure for a specific input G always generates very similar output (given we take care of the loss function to make all of this happen)

Correct Answer

If the discriminator is too good, then gradients for training G would be too small.

Quiz Score: 80.71 out of 100