



DL Lecture Quiz 12 (2021)

1 play · 32 players

 A private kahoot

Questions (7)

1 - Quiz

Auto-encoders generally learn a function mapping

20 sec



$X \rightarrow X$



$\{0,1\} \rightarrow \{0,1\}$



$X \rightarrow \{0,1\}$



$X \rightarrow Y$ (with $|Y| > |X|$)



2 - Quiz

Which of the following is/are generally true for overcomplete auto-encoders?

30 sec



They learn codes $|h| \geq |x|$



They always require some sort of regularization



They learn compression







They never overfit



3 - Quiz

Which of the following is/are true about VAEs?





30 sec

-  The encoder outputs the posterior distribution over the latent variables ✓
-  They learn to reconstruct a corrupted version of the input ✗
-  They are auto-encoders ✓
-  They add an L1 penalty on the latent code to the loss function ✗

4 - Quiz

What does the reparameterization trick do?





20 sec

-  Express the latent variable \mathbf{z} as a sum of deterministic and noise variables ✓
-  Make it possible to train encoder and decoder jointly using standard SGD ✓
-  Express the input variable \mathbf{x} as a sum of deterministic and noise variables ✗
-  Reinitializes all parameters of the network ✗

5 - Quiz

Which of the following are generative models?

30 sec

-  discriminator network in GANs ✗
-  decoder network in VAEs ✓
-  generator network in GANs ✓
-  encoder network in VAEs ✗

6 - True or false

GANs are a kind of auto-encoder

10 sec



True



False



7 - Quiz

When training GANs, the following term in the original min-max objective (hint: discriminator outputs ~ likelihood real)

60 sec



is minimized by the discriminator and maximized by the generator.



is maximized by both discriminator and generator



is maximized by the discriminator and minimized by the generator.



is minimized by both discriminator and generator

