Assignment 11

The due date for submitting this assignment has passed. Due on 2018-04-11, 23:59 IST.

Submitted assignment

1) What is the role of decoder in adversarial autoencoder?
   - Generate the images for given latent space information
   - For reducing MSE loss
   - For constructing better latent space
   - None of the above

No, the answer is incorrect.
Score: 0

Accepted Answers:
Generate the images for given latent space information

2) What could be a solution for generative model training
   - By appending an auxiliary branch to distinguish between fake and real images
   - Be reducing number of parameters in the model
   - Data augmentation through various morphological transformations
   - None of the above

No, the answer is incorrect.
Score: 0

Accepted Answers:
By appending an auxiliary branch to distinguish between fake and real images

3) What is the property of a well trained generative model
   - It can clearly distinguish between fake and real images
   - Given a set of images it can generated a good latent space
   - Given a a random noise the model is capable of generating realistic images
   - None of the above

No, the answer is incorrect.
Score: 0

Accepted Answers:
Given a a random noise the model is capable of generating realistic images

4) Which of the following is true for adversarial autoencoder
   - The information tapped out from decoder input is used to classify real or fake samples
   - The information sampled from Gaussian distribution is used to classify real or fake samples
   - Both a and b
   - None of the above

No, the answer is incorrect.
Score: 0

Accepted Answers:
5) Which of the following is true for adversarial autoencoder (AAE)  

- It is supervised framework as a classifier is used for distinguishing positive and negative samples
- It is unsupervised framework
- The sampling space should be Gaussian
- None of the above

**No, the answer is incorrect.**  
**Score: 0**

**Accepted Answers:**  
*It is unsupervised framework*

6) What is the distinction between AAE and AAE with regularization  

- Inclusion of class label during classification of positive or negative samples
- Inclusion of class label during reconstruction of real sample
- Removal of classification
- All of the above

**No, the answer is incorrect.**  
**Score: 0**

**Accepted Answers:**  
*Inclusion of class label during classification of positive or negative samples*

7) What is true for Supervised AAE  

- Inclusion of class label during classification of positive or negative samples
- Inclusion of class label during reconstruction of real sample
- Removal of classification
- All of the above

**No, the answer is incorrect.**  
**Score: 0**

**Accepted Answers:**  
*Inclusion of class label during reconstruction of real sample*

8) In the code snippet given what is the encoder?  

```
class Q_net(nn.Module):
    def __init__(self, X_dim,N,z_dim):
        super(Q_net, self).__init__()
        self.lin3gauss = nn.Linear(X_dim, z_dim)
    def forward(self, x):
        return xgauss

class P_net(nn.Module):
    def __init__(self, X_dim,N,z_dim):
        super(P_net, self).__init__()
        self.lin1 = nn.Linear(z_dim,X_dim)
    def forward(self, x):
        x = F.dropout(F.linear(x, p=0.25, training=self.training)
        return F.sigmoid(x)

class D_net_gauss(nn.Module):
    def __init__(self, N,z_dim):
        super(D_net_gauss, self).__init__()
        self.lin1 = nn.Linear(z_dim, N)
        self.lin3 = nn.Linear(N, 1)
    def forward(self, x):
        x = F.dropout(F.linear(x, p=0.25, training=self.training)
        return F.sigmoid(self.lin3(x))
```

- Q_net
- P_net
- D_net_gauss
- None of the above
9) In the code snippet given what is the decoder?

- Q_net
- P_net
- D_net_gauss
- None of the above

No, the answer is incorrect.
Score: 0

Accepted Answers:
- Q_net

10) In the code snippet given what is the classifier?

- Q_net
- P_net
No, the answer is incorrect.
Score: 0
Accepted Answers:
D_net_gauss