Viva Questions

Mention 2 limitations of ANNs which are solved by CNNs. Explain how.

What is Exploding gradient problem? Mention when does it occurs. List 2 solutions to mitigate it.

What effect does the following have on the size of feature map - Padding, Stride, Kernel Size.

If we have 4 filters in the first convolution layer, what would be the size of following pooling layer? Also

We have 2 filters in the first pooling layer, and 4 filters in the following convolution layer. Mention the r

What is feature sharing in CNNs? How does it helps?

Mention 2 use cases where CNNs could be more efficient than ANNs. And why?

Name any 3 layers in CNN. Briefly describe their resp. utilities.

The layer preceeding the flattening layer has 8 filters, each having 25x25 dimensions and RGB in nature.

What is the dropout layer? Which problem does it solves?

Mention 3 layers in a CNN which do not involve any engagement of the parameters.

Why activation functions like ReLU are preferred over functions like Sigmoid?

What is the size of the feature map for a given input size image, Filter Size, Stride, and Padding amount?

An input image has been converted into a matrix of size 12 X 12 along with a filter of size 3 X 3 with a St

Differentiate valid padding and same padding.

Name 5 parameters we add to the Conv2D layer of the CNN model.

Formulate an ANN architecture based on the following criteria - Number of inputs = 3, # Hidden layers

Mention the update equations to improve the parameters of an ANN model.

Explain why the initialization process of weights and bias is important for NN?

What do we call a neural network having no hidden layers? Also mention any 3 parameters while formi

number of parameters involved from Pooling -> Conv given kernel size = (3,3) and rest of the parameters

= 1, Size of hidden layer = 2, Size of output layer = 1, Activation (hidden) = ReLU, Activation (output) = S

igmoid. Mention number of parameters used in this architecture.