

Week 1 Quiz
Graded Assignment • 20 min

← Back

English ▾ Due Apr 27, 10:59 PM CST

Your grade: 100%

Your latest: 100% • Your highest: 100%
To pass you need at least 80%. We keep your highest score.

Next item →

1. If I want to view the history of my training, how can I access it?

1 / 1 point

- ☐ Download the model and inspect it
 - ☐ Pass the parameter 'history=true' to model.fit
 - ☐ Use model.fit to train the model
 - ☒ Create a variable 'history' and assign it to the return of model.fit
- ✔ **Correct**
Exactly! The History.history attribute is a record of training loss values and metrics values at successive epochs.

2. If my image is sized 150x150, and I pass a 3x3 convolution over it, what size is the resulting image? Assume you're using the default settings of the Conv2D layer just like in the lectures.

1 / 1 point

- ☐ 150x150
 - ☐ 450x450
 - ☒ 148x148
 - ☐ 153x153
- ✔ **Correct**
Nailed it! Applying a 3x3 convolution would result in a 148x148 image.

3. What does the image_dataset_from_directory utility allow you to do? Select the best answer.

1 / 1 point

- ☐ The ability to easily load images for training
 - ☐ The ability to pick the size of training images
 - ☐ The ability to automatically label images based on their directory name
 - ☒ All of the above
- ✔ **Correct**
That's right! It can do all the things mentioned above.

4. When exploring the graphs, the validation accuracy leveled out at about .75 after 2 epochs, but the training accuracy climbed close to 1.0 after 15 epochs. What's the significance of this?

1 / 1 point

- ☐ There was no point training after 2 epochs, as we overfit to the validation data
 - ☒ There was no point training after 2 epochs, as we overfit to the training data
 - ☐ A bigger training set would give us better training accuracy
 - ☐ A bigger validation set would give us better training accuracy
- ✔ **Correct**
Correct! Those values indicate overfitting to the training data.

5. If my data is sized 150x150, and I use Pooling of size 2x2, what size will the resulting image be?

1 / 1 point

- ☐ 149x149
 - ☒ 75x75
 - ☐ 148x148
 - ☐ 300x300
- ✔ **Correct**
Nailed it! Applying 2x2 pooling would result in a 75x75 image.

6. What's the name of the API that allows you to inspect the impact of convolutions on the images?

1 / 1 point

- ☐ The model.convolutions API
 - ☐ The model.pools API
 - ☒ The model.layers API
 - ☐ The model.images API
- ✔ **Correct**

7. Suppose you want to evaluate a model's performance on unseen data. Why is validation accuracy a better metric than training accuracy?

1 / 1 point

- ☐ It isn't, they're equally valuable
- ☐ There's no relationship between them
- ☒ The validation accuracy is based on images that the model wasn't trained on, and thus a better indicator of how the model will perform on new images.