

## **Performance Model**

Epoch 1/50

396/396 [=====] - 6s 8ms/step - loss: 0.5473 - accuracy: 0.7932 -  
val\_loss: 0.3458 - val\_accuracy: 0.8900

Epoch 2/50

396/396 [=====] - 3s 7ms/step - loss: 0.3745 - accuracy: 0.8861 -  
val\_loss: 0.3438 - val\_accuracy: 0.8900

Epoch 3/50

396/396 [=====] - 3s 6ms/step - loss: 0.3556 - accuracy: 0.8899 -  
val\_loss: 0.3439 - val\_accuracy: 0.8900

Epoch 4/50

396/396 [=====] - 2s 6ms/step - loss: 0.3476 - accuracy: 0.8918 -  
val\_loss: 0.3430 - val\_accuracy: 0.8900

Epoch 5/50

396/396 [=====] - 2s 6ms/step - loss: 0.3444 - accuracy: 0.8928 -  
val\_loss: 0.3429 - val\_accuracy: 0.8900

Epoch 6/50

396/396 [=====] - 2s 6ms/step - loss: 0.3415 - accuracy: 0.8927 -  
val\_loss: 0.3418 - val\_accuracy: 0.8900

Epoch 7/50

396/396 [=====] - 2s 5ms/step - loss: 0.3396 - accuracy: 0.8930 -  
val\_loss: 0.3400 - val\_accuracy: 0.8900

Epoch 8/50

396/396 [=====] - 2s 6ms/step - loss: 0.3384 - accuracy: 0.8934 -  
val\_loss: 0.3399 - val\_accuracy: 0.8900

Epoch 9/50

396/396 [=====] - 2s 6ms/step - loss: 0.3366 - accuracy: 0.8933 -  
val\_loss: 0.3377 - val\_accuracy: 0.8900

Epoch 10/50

396/396 [=====] - 2s 5ms/step - loss: 0.3360 - accuracy: 0.8932 -  
val\_loss: 0.3388 - val\_accuracy: 0.8900

Epoch 11/50

396/396 [=====] - 2s 5ms/step - loss: 0.3345 - accuracy: 0.8934 -  
val\_loss: 0.3382 - val\_accuracy: 0.8900

Model: "sequential"

---

Layer (type)	Output Shape	Param #
--------------	--------------	---------

...

Total params: 18,690

Trainable params: 18,178

Non-trainable params: 512

---

Output is truncated. View as a scrollable element or open in a text editor. Adjust cell output settings...

### **Model Evaluation**

198/198 [=====] - 1s 3ms/step - loss: 0.3377 - accuracy: 0.8900

Test Loss: 0.3377, Test Accuracy: 89.00%