

## Model Output

```
%runfile 'C:/Users/R c/.spyder-py3/breast_cancer_model_optimized.py' --wdir
2025-08-24 14:36:41.349697: I tensorflow/core/util/port.cc:153] oneDNN custom
operations are on. You may see slightly different numerical results due to floating-point
round-off errors from different computation orders. To turn them off, set the environment
variable `TF_ENABLE_ONEDNN_OPTS=0`.
2025-08-24 14:36:47.317598: I tensorflow/core/util/port.cc:153] oneDNN custom
operations are on. You may see slightly different numerical results due to floating-point
round-off errors from different computation orders. To turn them off, set the environment
variable `TF_ENABLE_ONEDNN_OPTS=0`.
WARNING:tensorflow:From C:\Users\R c\anaconda3\Lib\site-
packages\keras\src\backend\common\global_state.py:82: The name tf.reset_default_graph
is deprecated. Please use tf.compat.v1.reset_default_graph instead.
```

**Starting breast cancer classification training...**

**Found 24576 files belonging to 2 classes.**

**Using 19661 files for training.**

```
2025-08-24 14:36:51.625440: I tensorflow/core/platform/cpu_feature_guard.cc:210] This
TensorFlow binary is optimized to use available CPU instructions in performance-critical
operations.
```

To enable the following instructions: SSE3 SSE4.1 SSE4.2 AVX AVX2 FMA, in other operations, rebuild TensorFlow with the appropriate compiler flags.

Found 24576 files belonging to 2 classes.

Using 4915 files for validation.

```
2025-08-24 14:38:09.256417: I tensorflow/core/framework/local_rendezvous.cc:407]
```

Local rendezvous is aborting with status: OUT\_OF\_RANGE: End of sequence

Model: "functional\_1"

Layer (type)	Output Shape	Param #
input_layer_2 (InputLayer)	(None, 224, 224, 3)	0
mobilenetv2_1.00_224 (Functional)	(None, 1280)	2,257,984
dense (Dense)	(None, 128)	163,968
dropout (Dropout)	(None, 128)	0
dense_1 (Dense)	(None, 1)	129

Total params: 2,422,081 (9.24 MB)

Trainable params: 164,097 (641.00 KB)  
Non-trainable params: 2,257,984 (8.61 MB)

=== TRAINING ===

Epoch 1/30

615/615 ————— 0s 592ms/step - accuracy: 0.5992 - auc: 0.6390 - loss: 0.6702  
WARNING:absl:You are saving your model as an HDF5 file via `model.save()` or `keras.saving.save\_model(model)`. This file format is considered legacy. We recommend using instead the native Keras format, e.g. `model.save('my\_model.keras')` or `keras.saving.save\_model(model, 'my\_model.keras')`.

615/615 ————— 478s 766ms/step - accuracy: 0.6433 - auc: 0.6998 - loss: 0.6293 - val\_accuracy: 0.7320 - val\_auc: 0.8101 - val\_loss: 0.5586 - learning\_rate: 1.0000e-04

Epoch 2/30

615/615 ————— 0s 547ms/step - accuracy: 0.7227 - auc: 0.7932 - loss: 0.5558  
WARNING:absl:You are saving your model as an HDF5 file via `model.save()` or `keras.saving.save\_model(model)`. This file format is considered legacy. We recommend using instead the native Keras format, e.g. `model.save('my\_model.keras')` or `keras.saving.save\_model(model, 'my\_model.keras')`.

615/615 ————— 411s 667ms/step - accuracy: 0.7307 - auc: 0.8039 - loss: 0.5449 - val\_accuracy: 0.7703 - val\_auc: 0.8528 - val\_loss: 0.4999 - learning\_rate: 1.0000e-04

Epoch 3/30

218/615 ————— 3:44 566ms/step - accuracy: 0.7740 - auc: 0.8545 - loss: 0.4874  
^CTerminate batch job (Y/N)?

The kernel died, restarting...

```
%runfile 'C:/Users/R c/.spyder-py3/breast_cancer_model_optimized.py' --wdir
WARNING:tensorflow:From C:\Users\R c\anaconda3\Lib\site-packages\keras\src\backend\common\global_state.py:82: The name tf.reset_default_graph is deprecated. Please use tf.compat.v1.reset_default_graph instead.
```

Starting breast cancer classification training...

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Total params: 2,422,081 (9.24 MB)

Trainable params: 164,097 (641.00 KB)

Non-trainable params: 2,257,984 (8.61 MB)

=== TRAINING ===

Epoch 1/30

615/615 ————— 0s 451ms/step - accuracy: 0.5926 - auc: 0.6236 - loss: 0.6804WARNING:absl:You are saving your model as an HDF5 file via `model.save()` or `keras.saving.save\_model(model)`. This file format is considered legacy. We recommend using instead the native Keras format, e.g. `model.save('my\_model.keras')` or `keras.saving.save\_model(model, 'my\_model.keras')`.

615/615 ————— 348s 556ms/step - accuracy: 0.6367 - auc: 0.6874 - loss: 0.6381 - val\_accuracy: 0.7449 - val\_auc: 0.8167 - val\_loss: 0.5501 - learning\_rate: 1.0000e-04

Epoch 2/30

615/615 ————— 0s 498ms/step - accuracy: 0.7207 - auc: 0.7936 - loss: 0.5552WARNING:absl:You are saving your model as an HDF5 file via `model.save()` or `keras.saving.save\_model(model)`. This file format is considered legacy. We recommend using instead the native Keras format, e.g. `model.save('my\_model.keras')` or `keras.saving.save\_model(model, 'my\_model.keras')`.

615/615 ————— 375s 609ms/step - accuracy: 0.7292 - auc: 0.8061 - loss: 0.5425 - val\_accuracy: 0.7778 - val\_auc: 0.8542 - val\_loss: 0.4948 - learning\_rate: 1.0000e-04

Epoch 3/30

615/615 ————— 0s 487ms/step - accuracy: 0.7706 - auc: 0.8479 - loss: 0.4937WARNING:absl:You are saving your model as an HDF5 file via `model.save()` or `keras.saving.save\_model(model)`. This file format is considered legacy. We recommend using instead the native Keras format, e.g. `model.save('my\_model.keras')` or `keras.saving.save\_model(model, 'my\_model.keras')`.

615/615 ————— 376s 611ms/step - accuracy:  
0.7725 - auc: 0.8519 - loss: 0.4869 - val\_accuracy: 0.7986 - val\_auc: 0.8777 - val\_loss:  
0.4602 - learning\_rate: 1.0000e-04  
Epoch 4/30

615/615 ————— 0s 608ms/step - accuracy:  
0.7907 - auc: 0.8730 - loss: 0.4555WARNING:absl:You are saving your model as an  
HDF5 file via `model.save()` or `keras.saving.save\_model(model)`. This file format is  
considered legacy. We recommend using instead the native Keras format, e.g.  
`model.save('my\_model.keras')` or `keras.saving.save\_model(model, 'my\_model.keras')`.  
615/615 ————— 439s 712ms/step - accuracy:  
0.7935 - auc: 0.8774 - loss: 0.4487 - val\_accuracy: 0.8187 - val\_auc: 0.8972 - val\_loss:  
0.4255 - learning\_rate: 1.0000e-04  
Epoch 5/30

615/615 ————— 0s 486ms/step - accuracy:  
0.8103 - auc: 0.8906 - loss: 0.4263WARNING:absl:You are saving your model as an  
HDF5 file via `model.save()` or `keras.saving.save\_model(model)`. This file format is  
considered legacy. We recommend using instead the native Keras format, e.g.  
`model.save('my\_model.keras')` or `keras.saving.save\_model(model, 'my\_model.keras')`.  
615/615 ————— 363s 589ms/step - accuracy:  
0.8078 - auc: 0.8905 - loss: 0.4267 - val\_accuracy: 0.8208 - val\_auc: 0.9041 - val\_loss:  
0.4133 - learning\_rate: 1.0000e-04  
Epoch 6/30

615/615 ————— 0s 490ms/step - accuracy:  
0.8200 - auc: 0.9043 - loss: 0.4018WARNING:absl:You are saving your model as an  
HDF5 file via `model.save()` or `keras.saving.save\_model(model)`. This file format is  
considered legacy. We recommend using instead the native Keras format, e.g.  
`model.save('my\_model.keras')` or `keras.saving.save\_model(model, 'my\_model.keras')`.  
615/615 ————— 368s 597ms/step - accuracy:  
0.8216 - auc: 0.9053 - loss: 0.3994 - val\_accuracy: 0.8264 - val\_auc: 0.9085 - val\_loss:  
0.4023 - learning\_rate: 1.0000e-04  
Epoch 7/30

615/615 ————— 0s 504ms/step - accuracy:  
0.8362 - auc: 0.9124 - loss: 0.3859WARNING:absl:You are saving your model as an  
HDF5 file via `model.save()` or `keras.saving.save\_model(model)`. This file format is  
considered legacy. We recommend using instead the native Keras format, e.g.  
`model.save('my\_model.keras')` or `keras.saving.save\_model(model, 'my\_model.keras')`.  
615/615 ————— 379s 616ms/step - accuracy:  
0.8337 - auc: 0.9122 - loss: 0.3862 - val\_accuracy: 0.8338 - val\_auc: 0.9179 - val\_loss:  
0.3847 - learning\_rate: 1.0000e-04  
Epoch 8/30

615/615 ————— 0s 511ms/step - accuracy:  
0.8518 - auc: 0.9283 - loss: 0.3550WARNING:absl:You are saving your model as an  
HDF5 file via `model.save()` or `keras.saving.save\_model(model)`. This file format is  
considered legacy. We recommend using instead the native Keras format, e.g.  
`model.save('my\_model.keras')` or `keras.saving.save\_model(model, 'my\_model.keras')`.

615/615 ————— 384s 623ms/step - accuracy:  
0.8467 - auc: 0.9257 - loss: 0.3586 - val\_accuracy: 0.8466 - val\_auc: 0.9268 - val\_loss:  
0.3633 - learning\_rate: 1.0000e-04  
Epoch 9/30

615/615 ————— 0s 512ms/step - accuracy:  
0.8526 - auc: 0.9299 - loss: 0.3477WARNING:absl:You are saving your model as an  
HDF5 file via `model.save()` or `keras.saving.save\_model(model)`. This file format is  
considered legacy. We recommend using instead the native Keras format, e.g.  
`model.save('my\_model.keras')` or `keras.saving.save\_model(model, 'my\_model.keras')`.  
615/615 ————— 386s 626ms/step - accuracy:  
0.8544 - auc: 0.9322 - loss: 0.3437 - val\_accuracy: 0.8462 - val\_auc: 0.9296 - val\_loss:  
0.3628 - learning\_rate: 1.0000e-04  
Epoch 10/30

615/615 ————— 0s 511ms/step - accuracy:  
0.8622 - auc: 0.9361 - loss: 0.3338WARNING:absl:You are saving your model as an  
HDF5 file via `model.save()` or `keras.saving.save\_model(model)`. This file format is  
considered legacy. We recommend using instead the native Keras format, e.g.  
`model.save('my\_model.keras')` or `keras.saving.save\_model(model, 'my\_model.keras')`.  
615/615 ————— 384s 623ms/step - accuracy:  
0.8598 - auc: 0.9353 - loss: 0.3351 - val\_accuracy: 0.8496 - val\_auc: 0.9301 - val\_loss:  
0.3496 - learning\_rate: 1.0000e-04  
Epoch 11/30

615/615 ————— 0s 552ms/step - accuracy:  
0.8714 - auc: 0.9450 - loss: 0.3121WARNING:absl:You are saving your model as an  
HDF5 file via `model.save()` or `keras.saving.save\_model(model)`. This file format is  
considered legacy. We recommend using instead the native Keras format, e.g.  
`model.save('my\_model.keras')` or `keras.saving.save\_model(model, 'my\_model.keras')`.  
615/615 ————— 419s 681ms/step - accuracy:  
0.8662 - auc: 0.9429 - loss: 0.3164 - val\_accuracy: 0.8625 - val\_auc: 0.9399 - val\_loss:  
0.3300 - learning\_rate: 1.0000e-04  
Epoch 12/30

615/615 ————— 0s 522ms/step - accuracy:  
0.8727 - auc: 0.9462 - loss: 0.3077WARNING:absl:You are saving your model as an  
HDF5 file via `model.save()` or `keras.saving.save\_model(model)`. This file format is  
considered legacy. We recommend using instead the native Keras format, e.g.  
`model.save('my\_model.keras')` or `keras.saving.save\_model(model, 'my\_model.keras')`.  
615/615 ————— 384s 623ms/step - accuracy:  
0.8730 - auc: 0.9457 - loss: 0.3090 - val\_accuracy: 0.8700 - val\_auc: 0.9447 - val\_loss:  
0.3185 - learning\_rate: 1.0000e-04  
Epoch 13/30

615/615 ————— 334s 543ms/step - accuracy:  
0.8790 - auc: 0.9512 - loss: 0.2944 - val\_accuracy: 0.8653 - val\_auc: 0.9443 - val\_loss:  
0.3195 - learning\_rate: 1.0000e-04  
Epoch 14/30

615/615 ————— 0s 615ms/step - accuracy:  
0.8879 - auc: 0.9585 - loss: 0.2749WARNING:absl:You are saving your model as an  
HDF5 file via `model.save()` or `keras.saving.save\_model(model)`. This file format is  
considered legacy. We recommend using instead the native Keras format, e.g.  
`model.save('my\_model.keras')` or `keras.saving.save\_model(model, 'my\_model.keras')`.

615/615 ————— 523s 849ms/step - accuracy:  
0.8858 - auc: 0.9564 - loss: 0.2792 - val\_accuracy: 0.8716 - val\_auc: 0.9481 - val\_loss:  
0.3009 - learning\_rate: 1.0000e-04  
Epoch 15/30

615/615 ————— 0s 643ms/step - accuracy:  
0.8891 - auc: 0.9589 - loss: 0.2706WARNING:absl:You are saving your model as an  
HDF5 file via `model.save()` or `keras.saving.save\_model(model)`. This file format is  
considered legacy. We recommend using instead the native Keras format, e.g.  
`model.save('my\_model.keras')` or `keras.saving.save\_model(model, 'my\_model.keras')`.

615/615 ————— 470s 761ms/step - accuracy:  
0.8875 - auc: 0.9574 - loss: 0.2752 - val\_accuracy: 0.8781 - val\_auc: 0.9515 - val\_loss:  
0.2935 - learning\_rate: 1.0000e-04  
Epoch 16/30

615/615 ————— 0s 482ms/step - accuracy:  
0.8941 - auc: 0.9611 - loss: 0.2630WARNING:absl:You are saving your model as an  
HDF5 file via `model.save()` or `keras.saving.save\_model(model)`. This file format is  
considered legacy. We recommend using instead the native Keras format, e.g.  
`model.save('my\_model.keras')` or `keras.saving.save\_model(model, 'my\_model.keras')`.

615/615 ————— 369s 598ms/step - accuracy:  
0.8890 - auc: 0.9582 - loss: 0.2715 - val\_accuracy: 0.8850 - val\_auc: 0.9552 - val\_loss:  
0.2833 - learning\_rate: 1.0000e-04  
Epoch 17/30

615/615 ————— 0s 474ms/step - accuracy:  
0.8987 - auc: 0.9628 - loss: 0.2581WARNING:absl:You are saving your model as an  
HDF5 file via `model.save()` or `keras.saving.save\_model(model)`. This file format is  
considered legacy. We recommend using instead the native Keras format, e.g.  
`model.save('my\_model.keras')` or `keras.saving.save\_model(model, 'my\_model.keras')`.

615/615 ————— 358s 581ms/step - accuracy:  
0.8956 - auc: 0.9614 - loss: 0.2624 - val\_accuracy: 0.8844 - val\_auc: 0.9578 - val\_loss:  
0.2855 - learning\_rate: 1.0000e-04  
Epoch 18/30

615/615 ————— 0s 615ms/step - accuracy:  
0.9024 - auc: 0.9656 - loss: 0.2485WARNING:absl:You are saving your model as an  
HDF5 file via `model.save()` or `keras.saving.save\_model(model)`. This file format is  
considered legacy. We recommend using instead the native Keras format, e.g.  
`model.save('my\_model.keras')` or `keras.saving.save\_model(model, 'my\_model.keras')`.

615/615 ————— 497s 768ms/step - accuracy:  
0.8978 - auc: 0.9641 - loss: 0.2529 - val\_accuracy: 0.8883 - val\_auc: 0.9589 - val\_loss:  
0.2742 - learning\_rate: 1.0000e-04  
Epoch 19/30

615/615 ————— 0s 706ms/step - accuracy:  
0.9032 - auc: 0.9665 - loss: 0.2456WARNING:absl:You are saving your model as an  
HDF5 file via `model.save()` or `keras.saving.save\_model(model)`. This file format is  
considered legacy. We recommend using instead the native Keras format, e.g.  
`model.save('my\_model.keras')` or `keras.saving.save\_model(model, 'my\_model.keras')`.

615/615 ————— 529s 859ms/step - accuracy:  
0.9006 - auc: 0.9655 - loss: 0.2483 - val\_accuracy: 0.8930 - val\_auc: 0.9614 - val\_loss:  
0.2668 - learning\_rate: 1.0000e-04  
Epoch 20/30

615/615 ————— 0s 730ms/step - accuracy:  
0.9062 - auc: 0.9689 - loss: 0.2365WARNING:absl:You are saving your model as an  
HDF5 file via `model.save()` or `keras.saving.save\_model(model)`. This file format is  
considered legacy. We recommend using instead the native Keras format, e.g.  
`model.save('my\_model.keras')` or `keras.saving.save\_model(model, 'my\_model.keras')`.

615/615 ————— 542s 879ms/step - accuracy:  
0.9028 - auc: 0.9670 - loss: 0.2422 - val\_accuracy: 0.8970 - val\_auc: 0.9647 - val\_loss:  
0.2558 - learning\_rate: 1.0000e-04  
Epoch 21/30

615/615 ————— 0s 655ms/step - accuracy:  
0.9066 - auc: 0.9694 - loss: 0.2340WARNING:absl:You are saving your model as an  
HDF5 file via `model.save()` or `keras.saving.save\_model(model)`. This file format is  
considered legacy. We recommend using instead the native Keras format, e.g.  
`model.save('my\_model.keras')` or `keras.saving.save\_model(model, 'my\_model.keras')`.

615/615 ————— 492s 798ms/step - accuracy:  
0.9075 - auc: 0.9697 - loss: 0.2337 - val\_accuracy: 0.8993 - val\_auc: 0.9664 - val\_loss:  
0.2587 - learning\_rate: 1.0000e-04  
Epoch 22/30

615/615 ————— 0s 648ms/step - accuracy:  
0.9122 - auc: 0.9726 - loss: 0.2221  
Epoch 22: ReduceLROnPlateau reducing learning rate to 4.999999873689376e-05.

615/615 ————— 486s 790ms/step - accuracy:  
0.9094 - auc: 0.9716 - loss: 0.2258 - val\_accuracy: 0.8936 - val\_auc: 0.9636 - val\_loss:  
0.2564 - learning\_rate: 1.0000e-04  
Epoch 23/30

615/615 ————— 0s 655ms/step - accuracy:  
0.9194 - auc: 0.9765 - loss: 0.2100WARNING:absl:You are saving your model as an  
HDF5 file via `model.save()` or `keras.saving.save\_model(model)`. This file format is  
considered legacy. We recommend using instead the native Keras format, e.g.  
`model.save('my\_model.keras')` or `keras.saving.save\_model(model, 'my\_model.keras')`.

615/615 ————— 492s 798ms/step - accuracy:  
0.9161 - auc: 0.9757 - loss: 0.2121 - val\_accuracy: 0.9040 - val\_auc: 0.9691 - val\_loss:  
0.2373 - learning\_rate: 5.0000e-05  
Epoch 24/30

615/615 ————— 0s 649ms/step - accuracy:  
0.9158 - auc: 0.9753 - loss: 0.2119WARNING:absl:You are saving your model as an  
HDF5 file via `model.save()` or `keras.saving.save\_model(model)`. This file format is  
considered legacy. We recommend using instead the native Keras format, e.g.  
`model.save('my\_model.keras')` or `keras.saving.save\_model(model, 'my\_model.keras')`.

615/615 ————— 488s 793ms/step - accuracy:  
0.9161 - auc: 0.9744 - loss: 0.2154 - val\_accuracy: 0.9097 - val\_auc: 0.9705 - val\_loss:  
0.2314 - learning\_rate: 5.0000e-05  
Epoch 25/30

615/615 ————— 489s 794ms/step - accuracy:  
0.9148 - auc: 0.9758 - loss: 0.2100 - val\_accuracy: 0.9099 - val\_auc: 0.9702 - val\_loss:  
0.2332 - learning\_rate: 5.0000e-05  
Epoch 26/30

615/615 ————— 0s 655ms/step - accuracy:  
0.9233 - auc: 0.9789 - loss: 0.1988WARNING:absl:You are saving your model as an  
HDF5 file via `model.save()` or `keras.saving.save\_model(model)`. This file format is  
considered legacy. We recommend using instead the native Keras format, e.g.  
`model.save('my\_model.keras')` or `keras.saving.save\_model(model, 'my\_model.keras')`.

615/615 ————— 499s 810ms/step - accuracy:  
0.9182 - auc: 0.9766 - loss: 0.2071 - val\_accuracy: 0.9117 - val\_auc: 0.9717 - val\_loss:  
0.2285 - learning\_rate: 5.0000e-05  
Epoch 27/30

615/615 ————— 0s 653ms/step - accuracy:  
0.9174 - auc: 0.9754 - loss: 0.2095WARNING:absl:You are saving your model as an  
HDF5 file via `model.save()` or `keras.saving.save\_model(model)`. This file format is  
considered legacy. We recommend using instead the native Keras format, e.g.  
`model.save('my\_model.keras')` or `keras.saving.save\_model(model, 'my\_model.keras')`.

615/615 ————— 483s 784ms/step - accuracy:  
0.9183 - auc: 0.9760 - loss: 0.2086 - val\_accuracy: 0.9150 - val\_auc: 0.9729 - val\_loss:  
0.2235 - learning\_rate: 5.0000e-05  
Epoch 28/30

615/615 ————— 457s 742ms/step - accuracy:  
0.9180 - auc: 0.9776 - loss: 0.2035 - val\_accuracy: 0.9119 - val\_auc: 0.9714 - val\_loss:  
0.2282 - learning\_rate: 5.0000e-05  
Epoch 29/30

615/615 ————— 0s 607ms/step - accuracy:  
0.9238 - auc: 0.9788 - loss: 0.1973  
Epoch 29: ReduceLROnPlateau reducing learning rate to 2.499999936844688e-05.

615/615 ————— 455s 738ms/step - accuracy:  
0.9243 - auc: 0.9785 - loss: 0.1988 - val\_accuracy: 0.9121 - val\_auc: 0.9725 - val\_loss:  
0.2244 - learning\_rate: 5.0000e-05  
Epoch 30/30

615/615 ————— 0s 523ms/step - accuracy:  
0.9262 - auc: 0.9805 - loss: 0.1908WARNING:absl:You are saving your model as an



HDF5 file via `model.save()` or `keras.saving.save\_model(model)`. This file format is considered legacy. We recommend using instead the native Keras format, e.g. `model.save('my\_model.keras')` or `keras.saving.save\_model(model, 'my\_model.keras')`.

615/615 ————— 395s 641ms/step - **accuracy: 0.9262 - auc: 0.9802 - loss: 0.1918 - val\_accuracy: 0.9164 - val\_auc: 0.9733 - val\_loss: 0.2191 - learning\_rate: 2.5000e-05**

WARNING:absl:You are saving your model as an HDF5 file via `model.save()` or `keras.saving.save\_model(model)`. This file format is considered legacy. We recommend using instead the native Keras format, e.g. `model.save('my\_model.keras')` or `keras.saving.save\_model(model, 'my\_model.keras')`.

**Keras model saved successfully!**

Starting TFLite conversion...

INFO:tensorflow:Assets written to:

C:\Users\RC2B28~1\AppData\Local\Temp\tmpuf\_pvh5\_\assets

INFO:tensorflow:Assets written to:

C:\Users\RC2B28~1\AppData\Local\Temp\tmpuf\_pvh5\_\assets

Saved artifact at 'C:\Users\RC2B28~1\AppData\Local\Temp\tmpuf\_pvh5\_'. The following endpoints are available:

\* Endpoint 'serve'

args\_0 (POSITIONAL\_ONLY): TensorSpec(shape=(None, 224, 224, 3), dtype=tf.float32, name='keras\_tensor\_158')

Output Type:

TensorSpec(shape=(None, 1), dtype=tf.float32, name=None)

Captures:

2154840954384: TensorSpec(shape=(), dtype=tf.resource, name=None)  
2154840954576: TensorSpec(shape=(), dtype=tf.resource, name=None)  
2154840954768: TensorSpec(shape=(), dtype=tf.resource, name=None)  
2154840953808: TensorSpec(shape=(), dtype=tf.resource, name=None)  
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[illegible]

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C:\Users\R c\anaconda3\Lib\site-packages\tensorflow\lite\python\convert.py:863:

UserWarning: Statistics for quantized inputs were expected, but not specified; continuing anyway.

warnings.warn(

**Created fully quantized uint8 model**

**TFLite conversion successful!**

**Final Evaluation:**

C:\Users\R c\anaconda3\Lib\site-packages\tensorflow\lite\python\interpreter.py:457:  
UserWarning: Warning: tf.lite.Interpreter is deprecated and is scheduled for deletion in  
TF 2.20. Please use the LiteRT interpreter from the ai\_edge\_litert package.  
See the [migration guide](https://ai.google.dev/edge/litert/migration)  
for details.

warnings.warn(\_INTERPRETER\_DELETION\_WARNING)

**154/154 ————— 72s 464ms/step - accuracy:**

**0.9164 - auc: 0.9733 - loss: 0.2191**

**Validation Accuracy: 0.9164**

**Validation AUC: 0.9733**