- 1 C:\Users\Usuario\AppData\Local\Programs\Python\
   Python311\python.exe "C:\Users\Usuario\
   PycharmProjects\AYR\_2024\_1\Unidad 2\
   Intro\_ConvolutionalNeuronalNetwork\entrenar.py"
- 2 2024-02-19 13:59:38.874600: I tensorflow/core/util/port.cc:113] 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`.
- 3 WARNING:tensorflow:From C:\Users\Usuario\AppData\
  Local\Programs\Python\Python311\Lib\site-packages\
  keras\src\losses.py:2976: The name tf.losses.
  sparse\_softmax\_cross\_entropy is deprecated. Please
  use tf.compat.v1.losses.sparse\_softmax\_cross\_entropy
  instead.

4

5 WARNING:tensorflow:From C:\Users\Usuario\AppData\
Local\Programs\Python\Python311\Lib\site-packages\
keras\src\backend.py:277: The name tf.
reset\_default\_graph is deprecated. Please use tf.
compat.v1.reset\_default\_graph instead.

6

- 7 Found 100 images belonging to 2 classes.
- 8 Found 60 images belonging to 2 classes.
- 9 2024-02-19 13:59:43.930241: I tensorflow/core/platform/cpu\_feature\_guard.cc:182] This TensorFlow binary is optimized to use available CPU instructions in performance-critical operations.
- 10 To enable the following instructions: SSE SSE2 SSE3 SSE4.1 SSE4.2 AVX2 FMA, in other operations, rebuild TensorFlow with the appropriate compiler flags.
- 11 WARNING:tensorflow:From C:\Users\Usuario\AppData\
  Local\Programs\Python\Python311\Lib\site-packages\
  keras\src\layers\pooling\max\_pooling2d.py:161: The
  name tf.nn.max\_pool is deprecated. Please use tf.nn.
  max\_pool2d instead.

12

- 13 Epoch 1/20
- 14 WARNING:tensorflow:From C:\Users\Usuario\AppData\
  Local\Programs\Python\Python311\Lib\site-packages\

```
14 keras\src\utils\tf_utils.py:492: The name tf.ragged.
  RaggedTensorValue is deprecated. Please use tf.compat
  .v1.ragged.RaggedTensorValue instead.
15
16 WARNING:tensorflow:From C:\Users\Usuario\AppData\
  Local\Programs\Python\Python311\Lib\site-packages\
  keras\src\engine\base_layer_utils.py:384: The name tf
  .executing_eagerly_outside_functions is deprecated.
  Please use tf.compat.v1.
  executing_eagerly_outside_functions instead.
17
18 30/30 [============= ] - 41s 1s/step
   - loss: 5.3981 - accuracy: 0.6364 - val_loss: 0.6406
   - val_accuracy: 0.9000
19 Epoch 2/20
20 30/30 [=========== ] - 39s 1s/step
   - loss: 0.4298 - accuracy: 0.8182 - val_loss: 0.1874
   - val_accuracy: 0.9333
21 Epoch 3/20
22 30/30 [============== ] - 40s 1s/step
   - loss: 0.0246 - accuracy: 1.0000 - val_loss: 0.4944
   - val_accuracy: 0.9333
23 Epoch 4/20
24 30/30 [============ ] - 40s 1s/step
   - loss: 9.3844e-04 - accuracy: 1.0000 - val_loss: 0.
  4731 - val_accuracy: 0.9333
25 Epoch 5/20
- loss: 2.8868e-04 - accuracy: 1.0000 - val_loss: 0.
  9551 - val_accuracy: 0.9000
27 Epoch 6/20
28 30/30 [============= ] - 39s 1s/step
   - loss: 8.0957e-04 - accuracy: 1.0000 - val_loss: 0.
  5300 - val_accuracy: 0.9333
29 Epoch 7/20
30 30/30 [============ ] - 39s 1s/step
   - loss: 2.1723e-04 - accuracy: 1.0000 - val_loss: 0.
  7284 - val_accuracy: 0.9333
31 Epoch 8/20
32 30/30 [============= ] - 41s 1s/step
   - loss: 8.7532e-05 - accuracy: 1.0000 - val_loss: 0.
```

```
32 3573 - val_accuracy: 0.9667
33 Epoch 9/20
34 30/30 [============ ] - 39s 1s/step
   - loss: 6.4626e-05 - accuracy: 1.0000 - val_loss: 0.
  3412 - val_accuracy: 0.9667
35 Epoch 10/20
36 30/30 [============= ] - 39s 1s/step
   - loss: 8.8837e-05 - accuracy: 1.0000 - val_loss: 0.
  7171 - val_accuracy: 0.9333
37 Epoch 11/20
38 30/30 [============= ] - 40s 1s/step
   - loss: 5.6494e-05 - accuracy: 1.0000 - val_loss: 0.
  7111 - val_accuracy: 0.9333
39 Epoch 12/20
40 30/30 [============= ] - 40s 1s/step
   - loss: 7.2247e-05 - accuracy: 1.0000 - val_loss: 0.
  6835 - val_accuracy: 0.9333
41 Epoch 13/20
42 30/30 [============= ] - 39s 1s/step
   - loss: 1.6352e-04 - accuracy: 1.0000 - val_loss: 0.
  6740 - val_accuracy: 0.9333
43 Epoch 14/20
44 30/30 [============= ] - 39s 1s/step
   - loss: 3.9582e-06 - accuracy: 1.0000 - val_loss: 0.
  7317 - val_accuracy: 0.9333
45 Epoch 15/20
46 30/30 [============= ] - 39s 1s/step
   - loss: 4.0247e-05 - accuracy: 1.0000 - val_loss: 0.
  5750 - val_accuracy: 0.9333
47 Epoch 16/20
48 30/30 [============ ] - 39s 1s/step
   - loss: 4.5319e-05 - accuracy: 1.0000 - val_loss: 1.
  1146 - val_accuracy: 0.9000
49 Epoch 17/20
50 30/30 [============ ] - 39s 1s/step
   - loss: 2.0324e-05 - accuracy: 1.0000 - val_loss: 0.
  4596 - val_accuracy: 0.9667
51 Epoch 18/20
52 30/30 [============ ] - 40s 1s/step
   - loss: 7.5339e-05 - accuracy: 1.0000 - val_loss: 1.
  1846 - val_accuracy: 0.9000
```

```
53 Epoch 19/20
54 30/30 [=========== ] - 39s 1s/step
   - loss: 4.6700e-05 - accuracy: 1.0000 - val_loss: 0.
  8464 - val_accuracy: 0.9333
55 Epoch 20/20
56 30/30 [=========== ] - 39s 1s/step
   - loss: 8.2928e-06 - accuracy: 1.0000 - val_loss: 0.
  8562 - val_accuracy: 0.9333
57 C:\Users\Usuario\AppData\Local\Programs\Python\
  Python311\Lib\site-packages\keras\src\engine\training
   .py:3103: UserWarning: You are saving your model as
  an HDF5 file via `model.save()`. This file format is
  considered legacy. We recommend using instead the
  native Keras format, e.g. `model.save('my_model.keras
   ')`.
58
    saving_api.save_model(
59
60 Process finished with exit code 0
61
```