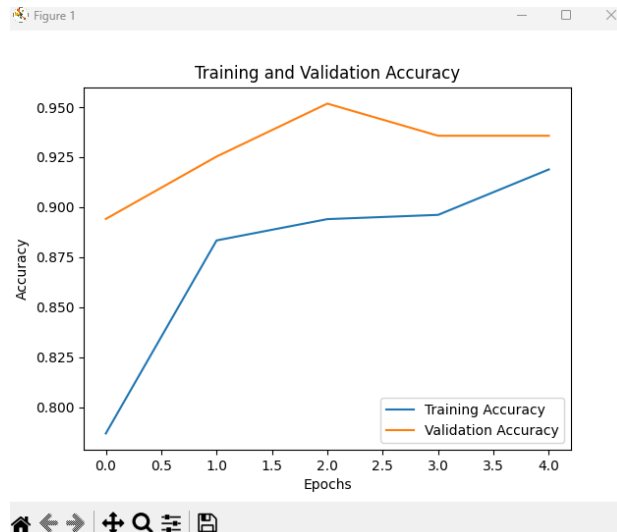


GS- AI ENGINEERING, COGNITIVE AND SEMANTIC COMPUTATION & IOT

Análise CNN

Com a camada Dense 20 epocas



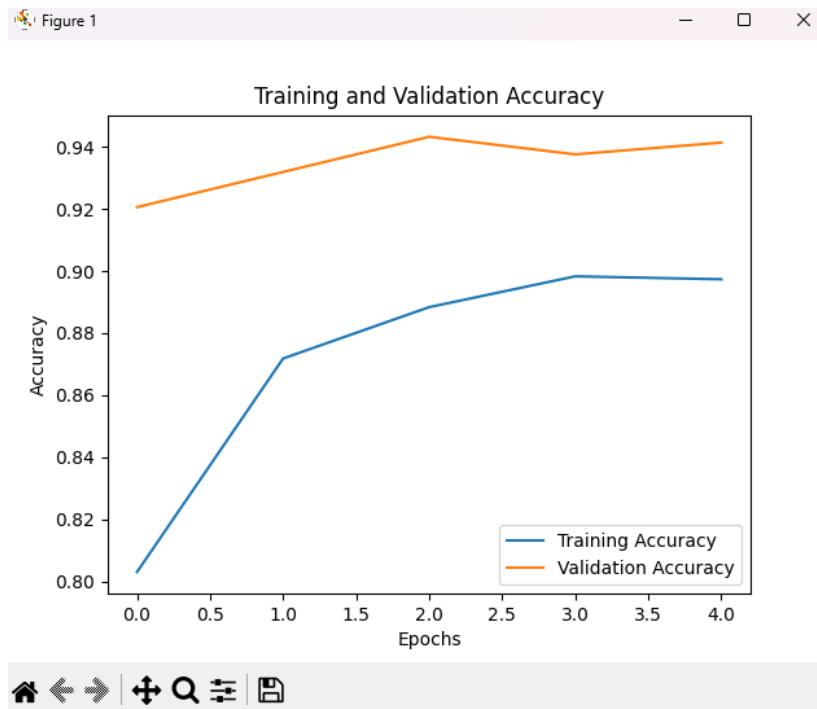
Accuracy no conjunto de testes: 0.8669



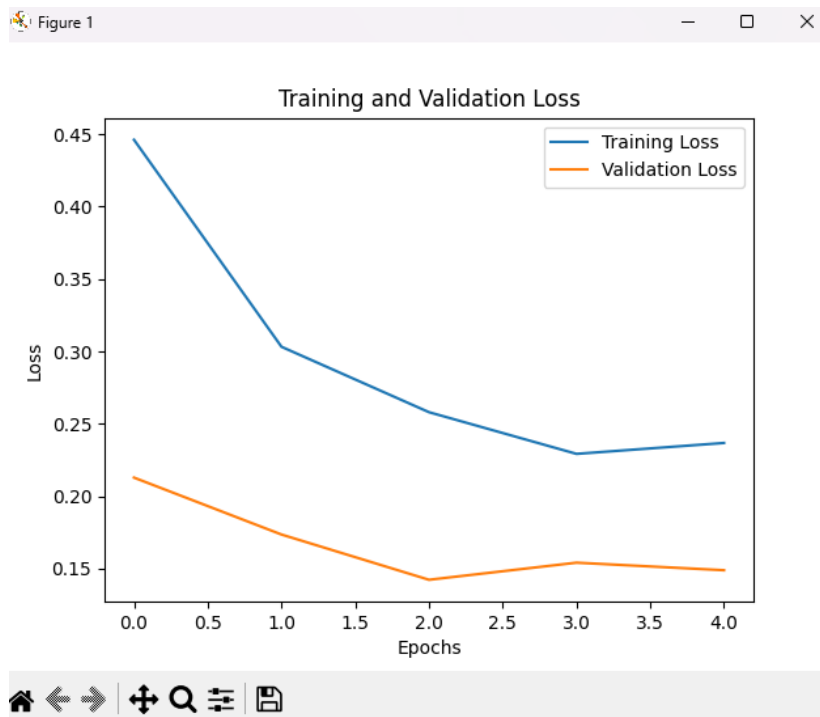
x=1.290 y=0.4215

```
133/133 [=====] - ETA: 0s - loss: 0.4687 - accuracy: 0.7869C:\Python311\Lib\site-packages\keras\src\engine\train
This file format is considered legacy. We recommend using instead the native Keras format, e.g. `model.save('my_model.keras')`.
saving_api.save_model(
133/133 [=====] - 56s 417ms/step - loss: 0.4687 - accuracy: 0.7869 - val_loss: 0.2595 - val_accuracy: 0.8941
Epoch 2/5
133/133 [=====] - 69s 521ms/step - loss: 0.2730 - accuracy: 0.8834 - val_loss: 0.1711 - val_accuracy: 0.9253
Epoch 3/5
133/133 [=====] - 64s 480ms/step - loss: 0.2558 - accuracy: 0.8940 - val_loss: 0.1551 - val_accuracy: 0.9518
Epoch 4/5
133/133 [=====] - 69s 518ms/step - loss: 0.2516 - accuracy: 0.8962 - val_loss: 0.1793 - val_accuracy: 0.9357
Epoch 5/5
133/133 [=====] - 68s 508ms/step - loss: 0.2103 - accuracy: 0.9189 - val_loss: 0.1652 - val_accuracy: 0.9357
20/20 [=====] - 5s 232ms/step - loss: 0.3583 - accuracy: 0.8670
Acurácia no conjunto de teste: 0.8669871687889099
```

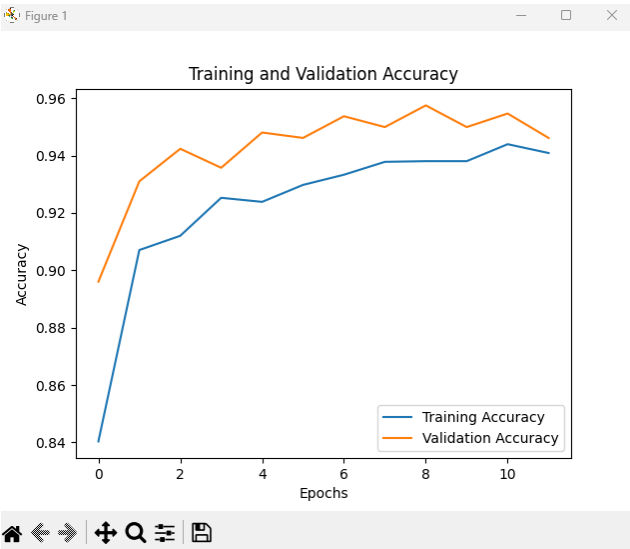
REMOVENDO CAMADA DENSE 20 epocas



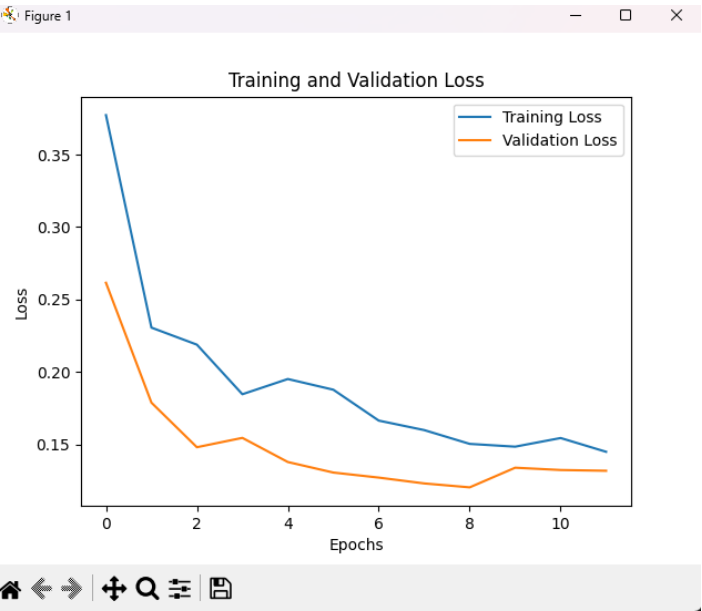
Accuracy no conjunto de testes: 0.7692



REMOVENDO DROPOUT 20 EPOCAS



Accuracy no conjunto de testes: 0.8445



```
Epoch 6/20
133/133 [=====] - 65s 490ms/step - loss: 0.1878 - accuracy: 0.9298 - val_loss: 0.1306 - val_accuracy: 0.9461
Epoch 7/20
133/133 [=====] - 64s 480ms/step - loss: 0.1665 - accuracy: 0.9333 - val_loss: 0.1271 - val_accuracy: 0.9537
Epoch 8/20
133/133 [=====] - 68s 512ms/step - loss: 0.1599 - accuracy: 0.9378 - val_loss: 0.1231 - val_accuracy: 0.9499
Epoch 9/20
133/133 [=====] - 54s 405ms/step - loss: 0.1504 - accuracy: 0.9380 - val_loss: 0.1204 - val_accuracy: 0.9575
Epoch 10/20
133/133 [=====] - 49s 371ms/step - loss: 0.1485 - accuracy: 0.9380 - val_loss: 0.1340 - val_accuracy: 0.9499
Epoch 11/20
133/133 [=====] - 49s 369ms/step - loss: 0.1545 - accuracy: 0.9439 - val_loss: 0.1324 - val_accuracy: 0.9546
Epoch 12/20
133/133 [=====] - 49s 370ms/step - loss: 0.1450 - accuracy: 0.9409 - val_loss: 0.1319 - val_accuracy: 0.9461
20/20 [=====] - 4s 192ms/step - loss: 0.5540 - accuracy: 0.8446
Acurácia no conjunto de teste: 0.8445512652397156
```