```
D:\DeepFake\pythonProject1\.venv\Scripts\python.exe D:\DeepFake\pythonProject1\Main\no_aug.py
2025-10-08 09:41:13.304891: 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`.
2025-10-08 09:41:16.819260: 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`.
Using TensorFlow 2.19.0
Config: {
  "model_name": "resnet50",
  "data_dir": "D:/DeepFake/pythonProject1/Frames/FF/FF 224",
  "epochs": 20,
  "batch_size": 32,
  "seed": 42,
  "base_trainable_at": null,
  "warmup_epochs": 3,
  "learning_rate": 0.001,
  "fine_tune_lr": 0.0001,
  "use_class_weights": false,
  "mixed_precision": false,
  "output_dir": "D:/DeepFake/pythonProject1/Main/FF/resnet50_no_aug"
}
Found 60796 images belonging to 2 classes.
Found 13032 images belonging to 2 classes.
Found 13030 images belonging to 2 classes.
2025-10-08 09:41:27.741325: 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 AVX_VNNI FMA, in other operations, rebuild TensorFlow with the appropriate compiler
```

```
23 flags.
24 D:\DeepFake\pythonProject1\.venv\Lib\site-packages\
   keras\src\trainers\data_adapters\py_dataset_adapter.
   py:121: UserWarning: Your `PyDataset` class should
   call `super().__init__(**kwargs)` in its constructor
   . `**kwargs` can include `workers`, `
   use_multiprocessing`, `max_queue_size`. Do not pass
   these arguments to `fit()`, as they will be ignored.
25   self._warn_if_super_not_called()
26 Epoch 1/3
27 1900/1900 ━━━━━━━━━━━━━━━━━━━━ 0s 851ms/step -
   accuracy: 0.8557 - loss: 0.4563
28 Epoch 1: val_accuracy improved from -inf to 0.87730,
   saving model to D:/DeepFake/pythonProject1/Main/FF/
   resnet50_no_aug\best_warmup.keras
29 1900/1900 ━━━━━━━━━━━━━━━━━━━━ 1981s 1s/step -
   accuracy: 0.8557 - loss: 0.4563 - val_accuracy: 0.
   8773 - val_loss: 0.3738 - learning_rate: 0.0010
30 Epoch 2/3
31 1900/1900 ━━━━━━━━━━━━━━━━━━━━ 0s 920ms/step -
   accuracy: 0.8674 - loss: 0.4103
32 Epoch 2: val_accuracy improved from 0.87730 to 0.
   87799, saving model to D:/DeepFake/pythonProject1/
   Main/FF/resnet50_no_aug\best_warmup.keras
33 1900/1900 ━━━━━━━━━━━━━━━━━━━━ 2113s 1s/step -
   accuracy: 0.8674 - loss: 0.4103 - val_accuracy: 0.
   8780 - val_loss: 0.3670 - learning_rate: 0.0010
34 Epoch 3/3
35 1900/1900 ━━━━━━━━━━━━━━━━━━━━ 0s 906ms/step -
   accuracy: 0.8687 - loss: 0.4024
36 Epoch 3: val_accuracy improved from 0.87799 to 0.
   88022, saving model to D:/DeepFake/pythonProject1/
   Main/FF/resnet50_no_aug\best_warmup.keras
37 1900/1900 ━━━━━━━━━━━━━━━━━━━━ 2090s 1s/step -
   accuracy: 0.8687 - loss: 0.4024 - val_accuracy: 0.
   8802 - val_loss: 0.3680 - learning_rate: 0.0010
38 Saved final model to: D:/DeepFake/pythonProject1/Main
   /FF/resnet50_no_aug\resnet50.keras
39 Evaluating on test set...
40 408/408 ━━━━━━━━━━━━━━━━━━━━ 374s 917ms/step -
   accuracy: 0.9917 - loss: 0.1010
```

```
41 Test accuracy: 0.8616 | Test loss: 0.3706
42 408/408 ━━━━━━━━━━━━━━━━━━━━ 332s 810ms/step
43              df  precision: 0.86  recall: 0.98  f1-
   score: 0.92  support: 11428.0
44            real  precision: 0.93  recall: 0.02  f1-
   score: 0.05  support: 1602.0
45        accuracy: 0.86
46       macro avg  precision: 0.90  recall: 0.50  f1-
   score: 0.49  support: 13030.0
47    weighted avg  precision: 0.87  recall: 0.86  f1-
   score: 0.81  support: 13030.0
48 Confusion Matrix:
49  [[11425     3]
50  [ 1540    62]]
51
52 Process finished with exit code 0
53
```