```
D:\DeepFake\pythonProject1\.venv\Scripts\python.exe D:\DeepFake\pythonProject1\Main\main.py
2025-09-11 17:51:49.654953: 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`.
2025-09-11 17:51:52.327148: 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": "mobilenetv3",
  "data_dir": "D:/DeepFake/pythonProject1/Frames/Celeb-df/Celeb-df 224 EX",
  "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/mobilenetv3"
}
Found 56902 images belonging to 2 classes.
Found 12197 images belonging to 2 classes.
Found 12195 images belonging to 2 classes.
2025-09-11 17:52:01.124892: 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 1779/1779 ━━━━━━━━━━━━━━━━━━━━ 0s 321ms/step -
   accuracy: 0.8969 - loss: 0.3593
28 Epoch 1: val_accuracy improved from -inf to 0.90407,
   saving model to D:/DeepFake/pythonProject1/Main/
   mobilenetv3\best_warmup.keras
29 1779/1779 ━━━━━━━━━━━━━━━━━━━━ 652s 365ms/step -
   accuracy: 0.8969 - loss: 0.3593 - val_accuracy: 0.
   9041 - val_loss: 0.3101 - learning_rate: 0.0010
30 Epoch 2/3
31 1779/1779 ━━━━━━━━━━━━━━━━━━━━ 0s 308ms/step -
   accuracy: 0.9028 - loss: 0.3233
32 Epoch 2: val_accuracy did not improve from 0.90407
33 1779/1779 ━━━━━━━━━━━━━━━━━━━━ 619s 348ms/step -
   accuracy: 0.9028 - loss: 0.3233 - val_accuracy: 0.
   9039 - val_loss: 0.3133 - learning_rate: 0.0010
34 Epoch 3/3
35 1779/1779 ━━━━━━━━━━━━━━━━━━━━ 0s 528ms/step -
   accuracy: 0.9012 - loss: 0.3240
36 Epoch 3: val_accuracy did not improve from 0.90407
37 1779/1779 ━━━━━━━━━━━━━━━━━━━━ 1033s 581ms/step -
   accuracy: 0.9012 - loss: 0.3240 - val_accuracy: 0.
   9041 - val_loss: 0.3096 - learning_rate: 0.0010
38 Saved final model to: D:/DeepFake/pythonProject1/Main
   /mobilenetv3\mobilenetv3.keras
39 Evaluating on test set...
40 382/382 ━━━━━━━━━━━━━━━━━━━━ 106s 278ms/step -
   accuracy: 0.6813 - loss: 0.7828
41 Test accuracy: 0.9040 | Test loss: 0.3094
42 382/382 ━━━━━━━━━━━━━━━━━━━━ 88s 222ms/step
43
44 Classification Report:
```

```
45
46                   precision    recall  f1-score
   support
47
48      Celeb-real       1.00      0.00      0.00
   1172
49 Celeb-synthesis       0.90      1.00      0.95
   11023
50
51        accuracy                           0.90
   12195
52       macro avg       0.95      0.50      0.48
   12195
53    weighted avg       0.91      0.90      0.86
   12195
54
55 Confusion Matrix:
56  [[    1  1171]
57  [    0 11023]]
58
59 Process finished with exit code 0
60
```