Epoch 1/50

WARNING:tensorflow:Gradients do not exist for variables ['gcn\_rotat\_e\_model\_\_sigmoid\_loss/rotat\_e\_encoder/imaginary\_weights:0'] when minimizing the loss. If you're using `model.compile()`, did you forget to provide a `loss` argument?

WARNING:tensorflow:Gradients do not exist for variables ['gcn\_rotat\_e\_model\_\_sigmoid\_loss/rotat\_e\_encoder/imaginary\_weights:0'] when minimizing the loss. If you're using `model.compile()`, did you forget to provide a `loss` argument?

WARNING:tensorflow:Gradients do not exist for variables ['gcn\_rotat\_e\_model\_\_sigmoid\_loss/rotat\_e\_encoder/imaginary\_weights:0'] when minimizing the loss. If you're using `model.compile()`, did you forget to provide a `loss` argument?

WARNING:tensorflow:Gradients do not exist for variables ['gcn\_rotat\_e\_model\_\_sigmoid\_loss/rotat\_e\_encoder/imaginary\_weights:0'] when minimizing the loss. If you're using `model.compile()`, did you forget to provide a `loss` argument?

1682/1682 [==============================] - ETA: 0s - loss: 6.0997 - accuracy: 0.50052024-03-18 01:56:36.196226: W tensorflow/tsl/framework/cpu\_allocator\_impl.cc:83] Allocation of 42037248000 exceeds 10% of free system memory.

2024-03-18 02:01:52.944508: W tensorflow/tsl/framework/cpu\_allocator\_impl.cc:83] Allocation of 2463498240 exceeds 10% of free system memory.

2024-03-18 02:01:53.805061: W tensorflow/tsl/framework/cpu\_allocator\_impl.cc:83] Allocation of 2463498240 exceeds 10% of free system memory.

1682/1682 [==============================] - 2714s 2s/step - loss: 6.0997 - accuracy: 0.5005 - val\_loss: 0.6938 - val\_accuracy: 0.5024 - lr: 1.0000e-04

Epoch 2/50

1682/1682 [==============================] - ETA: 0s - loss: 0.6932 - accuracy: 0.49872024-03-18 02:37:46.991859: W tensorflow/tsl/framework/cpu\_allocator\_impl.cc:83] Allocation of 42037248000 exceeds 10% of free system memory.

2024-03-18 02:42:36.549298: W tensorflow/tsl/framework/cpu\_allocator\_impl.cc:83] Allocation of 2463498240 exceeds 10% of free system memory.

1682/1682 [==============================] - 2443s 1s/step - loss: 0.6932 - accuracy: 0.4987 - val\_loss: 0.6931 - val\_accuracy: 0.4976 - lr: 1.0000e-04

Epoch 3/50

1682/1682 [==============================] - 2410s 1s/step - loss: 0.6931 - accuracy: 0.5005 - val\_loss: 0.6932 - val\_accuracy: 0.4976 - lr: 1.0000e-04

Epoch 4/50

1682/1682 [==============================] - 2436s 1s/step - loss: 0.6931 - accuracy: 0.4998 - val\_loss: 0.6932 - val\_accuracy: 0.4976 - lr: 1.0000e-04

Epoch 5/50

1682/1682 [==============================] - 2419s 1s/step - loss: 0.6931 - accuracy: 0.5005 - val\_loss: 0.6931 - val\_accuracy: 0.4976 - lr: 1.0000e-04

Epoch 6/50

1682/1682 [==============================] - 2428s 1s/step - loss: 0.6931 - accuracy: 0.4996 - val\_loss: 0.6932 - val\_accuracy: 0.4976 - lr: 1.0000e-04

Epoch 7/50

1682/1682 [==============================] - ETA: 0s - loss: 0.6931 - accuracy: 0.5003

Epoch 7: ReduceLROnPlateau reducing learning rate to 5.999999848427251e-05.

1682/1682 [==============================] - 2441s 1s/step - loss: 0.6931 - accuracy: 0.5003 - val\_loss: 0.6931 - val\_accuracy: 0.4976 - lr: 1.0000e-04

2883/2883 [==============================] - 38s 13ms/step

Evaluation Metrics:

Precision: 0.5000

Recall: 1.0000

F1 Score: 0.6666

ROC AUC: 0.5000

PR AUC: 0.5000

MCC: 0.0000

In [3]: y\_pred = (test\_scores > 0.6).astype(int)

...: y\_true = y\_test.astype(int)

...:

...: # Calculate evaluation metrics

...: precision = precision\_score(y\_true, y\_pred)

...: recall = recall\_score(y\_true, y\_pred)

...: f1 = f1\_score(y\_true, y\_pred)

...: roc\_auc = roc\_auc\_score(y\_true, test\_scores)

...: pr\_auc = average\_precision\_score(y\_true, test\_scores)

...: mcc = matthews\_corrcoef(y\_true, y\_pred)

...:

...: # Confusion Matrix

...: conf\_matrix = confusion\_matrix(y\_true, y\_pred)

...:

...: # Display evaluation metrics

...: print("\nEvaluation Metrics:")

...: print(f'Precision: {precision:.4f}')

...: print(f'Recall: {recall:.4f}')

...: print(f'F1 Score: {f1:.4f}')

...: print(f'ROC AUC: {roc\_auc:.4f}')

...: print(f'PR AUC: {pr\_auc:.4f}')

...: print(f'MCC: {mcc:.4f}')

C:\Users\skape\PycharmProjects\Thesis\_tensorflow\.venv\lib\site-packages\sklearn\metrics\\_classification.py:1471: UndefinedMetricWarning: Precision is ill-defined and being set to 0.0 due to no predicted samples. Use `zero\_division` parameter to control this behavior.

\_warn\_prf(average, modifier, msg\_start, len(result))

Evaluation Metrics:

Precision: 0.0000

Recall: 0.0000

F1 Score: 0.0000

ROC AUC: 0.5000

PR AUC: 0.5000

MCC: 0.0000

In [4]: y\_pred = (test\_scores > 0.7).astype(int)

...: y\_true = y\_test.astype(int)

...:

...: # Calculate evaluation metrics

...: precision = precision\_score(y\_true, y\_pred)

...: recall = recall\_score(y\_true, y\_pred)

...: f1 = f1\_score(y\_true, y\_pred)

...: roc\_auc = roc\_auc\_score(y\_true, test\_scores)

...: pr\_auc = average\_precision\_score(y\_true, test\_scores)

...: mcc = matthews\_corrcoef(y\_true, y\_pred)

...:

...: # Confusion Matrix

...: conf\_matrix = confusion\_matrix(y\_true, y\_pred)

...:

...: # Display evaluation metrics

...: print("\nEvaluation Metrics:")

...: print(f'Precision: {precision:.4f}')

...: print(f'Recall: {recall:.4f}')

...: print(f'F1 Score: {f1:.4f}')

...: print(f'ROC AUC: {roc\_auc:.4f}')

...: print(f'PR AUC: {pr\_auc:.4f}')

...: print(f'MCC: {mcc:.4f}')

C:\Users\skape\PycharmProjects\Thesis\_tensorflow\.venv\lib\site-packages\sklearn\metrics\\_classification.py:1471: UndefinedMetricWarning: Precision is ill-defined and being set to 0.0 due to no predicted samples. Use `zero\_division` parameter to control this behavior.

\_warn\_prf(average, modifier, msg\_start, len(result))

Evaluation Metrics:

Precision: 0.0000

Recall: 0.0000

F1 Score: 0.0000

ROC AUC: 0.5000

PR AUC: 0.5000

MCC: 0.0000

Εικόνα που περιέχει κείμενο, στιγμιότυπο οθόνης, γραμμή, διάγραμμα

Περιγραφή που δημιουργήθηκε αυτόματα

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