

Evaluation Report:

Clean	
overall_accuracy	1.0
overall_precision	1.0
overall_recall	1.0
metrics_per_class	
0	
precision	1.0
recall	1.0
f1-score	1.0
support	10
1	
precision	1.0
recall	1.0
f1-score	1.0
support	9
2	
precision	1.0
recall	1.0
f1-score	1.0
support	11
accuracy	1.0
macro avg	
precision	1.0
recall	1.0
f1-score	1.0
support	30
weighted avg	
precision	1.0
recall	1.0
f1-score	1.0
support	30
ZooAttack	

overall_accuracy	0.6
overall_precision	0.5644444444444444
overall_recall	0.6
metrics_per_class	
0	
precision	1.0
recall	1.0
f1-score	1.0
support	10
1	
precision	0.2
recall	0.1111111111111111
f1-score	0.14285714285714285
support	9
2	
precision	0.4666666666666667
recall	0.6363636363636364
f1-score	0.5384615384615385
support	11
accuracy	0.6
macro avg	
precision	0.5555555555555555
recall	0.5824915824915825
f1-score	0.5604395604395604
support	30
weighted avg	
precision	0.5644444444444444
recall	0.6
f1-score	0.5736263736263736
support	30
HopSkipJump	
overall_accuracy	0.0
overall_precision	0.0
overall_recall	0.0
metrics_per_class	

0	
precision	0.0
recall	0.0
f1-score	0.0
support	10.0
1	
precision	0.0
recall	0.0
f1-score	0.0
support	9.0
2	
precision	0.0
recall	0.0
f1-score	0.0
support	11.0
accuracy	0.0
macro avg	
precision	0.0
recall	0.0
f1-score	0.0
support	30.0
weighted avg	
precision	0.0
recall	0.0
f1-score	0.0
support	30.0
SignOPTAttack	
overall_accuracy	0.2
overall_precision	0.35
overall_recall	0.2
metrics_per_class	
0	
precision	0.75
recall	0.3
f1-score	0.4285714285714285

	support	10
1		
	precision	0.0
	recall	0.0
	f1-score	0.0
	support	9
2		
	precision	0.27272727272727
	recall	0.27272727272727
	f1-score	0.27272727272727
	support	11
	accuracy	0.2
macro avg		
	precision	0.34090909090909
	recall	0.19090909090909
	f1-score	0.23376623376623
	support	30
weighted avg		
	precision	0.35
	recall	0.2
	f1-score	0.24285714285714
	support	30
BoundaryAttack		
	overall_accuracy	0.0
	overall_precision	0.0
	overall_recall	0.0
metrics_per_class		
0		
	precision	0.0
	recall	0.0
	f1-score	0.0
	support	10.0
1		
	precision	0.0
	recall	0.0

f1-score	0.0
support	9.0
2	
precision	0.0
recall	0.0
f1-score	0.0
support	11.0
accuracy	0.0
macro avg	
precision	0.0
recall	0.0
f1-score	0.0
support	30.0
weighted avg	
precision	0.0
recall	0.0
f1-score	0.0
support	30.0
SamplingAttack	
overall_accuracy	0.9666666666666667
overall_precision	0.9700000000000001
overall_recall	0.9666666666666667
metrics_per_class	
0	
precision	1.0
recall	1.0
f1-score	1.0
support	10
1	
precision	0.9
recall	1.0
f1-score	0.9473684210526316
support	9
2	
precision	1.0

recall	0.9090909090909091
f1-score	0.9523809523809523
support	11
accuracy	0.9666666666666667
macro avg	
precision	0.9666666666666667
recall	0.9696969696969697
f1-score	0.9665831244778613
support	30
weighted avg	
precision	0.9700000000000001
recall	0.9666666666666667
f1-score	0.966750208855472
support	30
FeatureSqueezing	
overall_accuracy	0.9
overall_precision	0.925
overall_recall	0.9
metrics_per_class	
0	
precision	1.0
recall	1.0
f1-score	1.0
support	10
1	
precision	0.75
recall	1.0
f1-score	0.8571428571428571
support	9
2	
precision	1.0
recall	0.7272727272727273
f1-score	0.8421052631578948
support	11
accuracy	0.9

macro avg	
precision	0.9166666666666666
recall	0.9090909090909092
f1-score	0.899749373433584
support	30
weighted avg	
precision	0.925
recall	0.9
f1-score	0.899248120300752
support	30
ClassLabels	
overall_accuracy	0.3333333333333333
overall_precision	0.1111111111111111
overall_recall	0.3333333333333333
metrics_per_class	
0	
precision	0.3333333333333333
recall	1.0
f1-score	0.5
support	10
1	
precision	0.0
recall	0.0
f1-score	0.0
support	9
2	
precision	0.0
recall	0.0
f1-score	0.0
support	11
accuracy	0.3333333333333333
macro avg	
precision	0.1111111111111111
recall	0.3333333333333333
f1-score	0.1666666666666666

support	30
weighted avg	
precision	0.1111111111111111
recall	0.3333333333333333
f1-score	0.16666666666666666
support	30
('FeatureSqueezing', 'ZooAttack')	
overall_accuracy	0.7333333333333333
overall_precision	0.7333333333333333
overall_recall	0.7333333333333333
metrics_per_class	
0	
precision	1.0
recall	1.0
f1-score	1.0
support	10
1	
precision	0.5555555555555556
recall	0.5555555555555556
f1-score	0.5555555555555556
support	9
2	
precision	0.6363636363636364
recall	0.6363636363636364
f1-score	0.6363636363636364
support	11
accuracy	0.7333333333333333
macro avg	
precision	0.7306397306397306
recall	0.7306397306397306
f1-score	0.7306397306397306
support	30
weighted avg	
precision	0.7333333333333333
recall	0.7333333333333333

f1-score	0.7333333333333333
support	30
('FeatureSqueezing', 'HopSkipJump')	
overall_accuracy	0.26666666666666666
overall_precision	0.22236024844720498
overall_recall	0.26666666666666666
metrics_per_class	
0	
precision	0.0
recall	0.0
f1-score	0.0
support	10
1	
precision	0.21739130434782608
recall	0.5555555555555556
f1-score	0.3125
support	9
2	
precision	0.42857142857142855
recall	0.2727272727272727
f1-score	0.33333333333333326
support	11
accuracy	0.26666666666666666
macro avg	
precision	0.2153209109730849
recall	0.2760942760942761
f1-score	0.21527777777777776
support	30
weighted avg	
precision	0.22236024844720498
recall	0.26666666666666666
f1-score	0.21597222222222222
support	30
('FeatureSqueezing', 'SignOPTAttack')	
overall_accuracy	0.43333333333333335

overall_precision	0.6487878787878787
overall_recall	0.43333333333333335
metrics_per_class	
0	
precision	1.0
recall	0.3
f1-score	0.4615384615384615
support	10
1	
precision	0.3181818181818182
recall	0.7777777777777778
f1-score	0.45161290322580644
support	9
2	
precision	0.6
recall	0.2727272727272727
f1-score	0.37499999999999994
support	11
accuracy	0.43333333333333335
macro avg	
precision	0.6393939393939393
recall	0.45016835016835016
f1-score	0.429383788254756
support	30
weighted avg	
precision	0.6487878787878787
recall	0.43333333333333335
f1-score	0.42683002481389576
support	30
('FeatureSqueezing', 'BoundaryAttack')	
overall_accuracy	0.3
overall_precision	0.2641025641025641
overall_recall	0.3
metrics_per_class	
0	

	precision	0.0
	recall	0.0
	f1-score	0.0
	support	10
1		
	precision	0.2692307692307692
	recall	0.7777777777777778
	f1-score	0.39999999999999997
	support	9
2		
	precision	0.5
	recall	0.18181818181818182
	f1-score	0.26666666666666666
	support	11
	accuracy	0.3
macro avg		
	precision	0.2564102564102564
	recall	0.31986531986531985
	f1-score	0.2222222222222222
	support	30
weighted avg		
	precision	0.2641025641025641
	recall	0.3
	f1-score	0.21777777777777776
	support	30
('FeatureSqueezing', 'SamplingAttack')		
	overall_accuracy	0.9
	overall_precision	0.925
	overall_recall	0.9
metrics_per_class		
0		
	precision	1.0
	recall	1.0
	f1-score	1.0
	support	10

1	
precision	0.75
recall	1.0
f1-score	0.8571428571428571
support	9
2	
precision	1.0
recall	0.7272727272727273
f1-score	0.8421052631578948
support	11
accuracy	0.9
macro avg	
precision	0.9166666666666666
recall	0.9090909090909092
f1-score	0.899749373433584
support	30
weighted avg	
precision	0.925
recall	0.9
f1-score	0.899248120300752
support	30
('ClassLabels', 'ZooAttack')	
overall_accuracy	0.3333333333333333
overall_precision	0.1111111111111111
overall_recall	0.3333333333333333
metrics_per_class	
0	
precision	0.3333333333333333
recall	1.0
f1-score	0.5
support	10
1	
precision	0.0
recall	0.0
f1-score	0.0

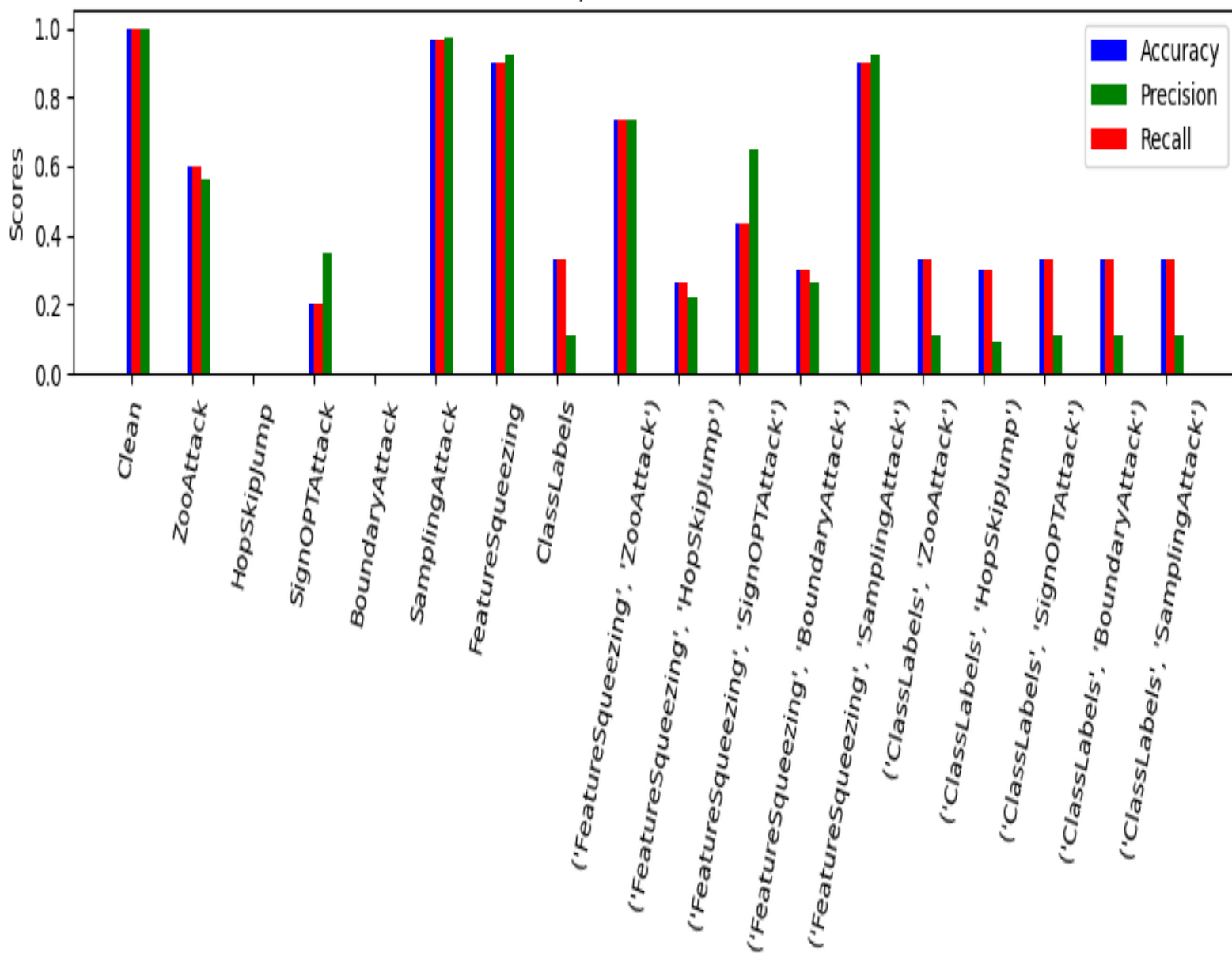
support	9
2	
precision	0.0
recall	0.0
f1-score	0.0
support	11
accuracy	0.3333333333333333
macro avg	
precision	0.1111111111111111
recall	0.3333333333333333
f1-score	0.16666666666666666
support	30
weighted avg	
precision	0.1111111111111111
recall	0.3333333333333333
f1-score	0.16666666666666666
support	30
('ClassLabels', 'HopSkipJump')	
overall_accuracy	0.3
overall_precision	0.09
overall_recall	0.3
metrics_per_class	
0	
precision	0.0
recall	0.0
f1-score	0.0
support	10
1	
precision	0.3
recall	1.0
f1-score	0.4615384615384615
support	9
2	
precision	0.0
recall	0.0

f1-score	0.0
support	11
accuracy	0.3
macro avg	
precision	0.09999999999999999
recall	0.3333333333333333
f1-score	0.15384615384615383
support	30
weighted avg	
precision	0.09
recall	0.3
f1-score	0.13846153846153844
support	30
('ClassLabels', 'SignOPTAttack')	
overall_accuracy	0.3333333333333333
overall_precision	0.11111111111111111
overall_recall	0.3333333333333333
metrics_per_class	
0	
precision	0.3333333333333333
recall	1.0
f1-score	0.5
support	10
1	
precision	0.0
recall	0.0
f1-score	0.0
support	9
2	
precision	0.0
recall	0.0
f1-score	0.0
support	11
accuracy	0.3333333333333333
macro avg	

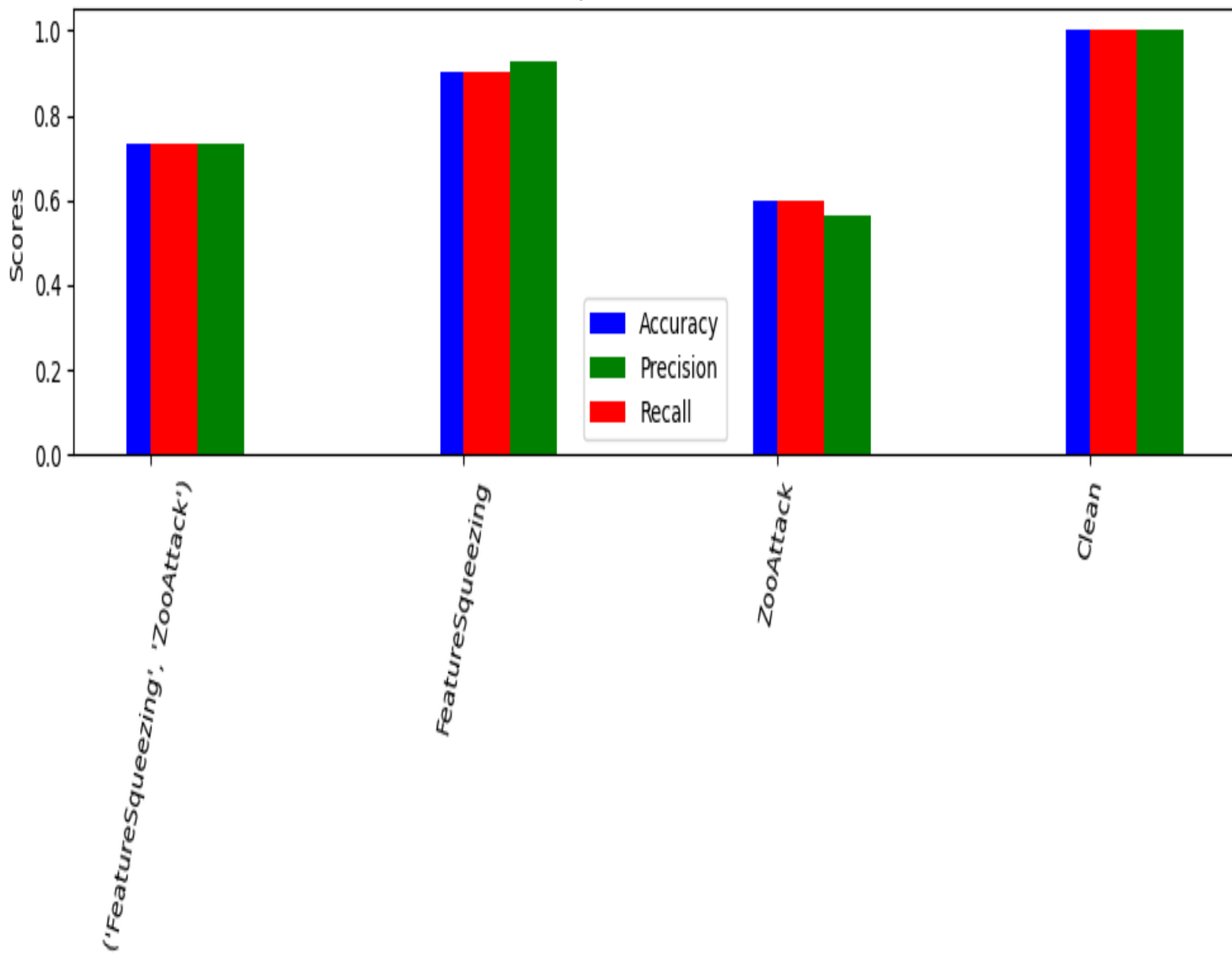
precision	0.1111111111111111
recall	0.3333333333333333
f1-score	0.1666666666666666
support	30
weighted avg	
precision	0.1111111111111111
recall	0.3333333333333333
f1-score	0.1666666666666666
support	30
('ClassLabels', 'BoundaryAttack')	
overall_accuracy	0.3333333333333333
overall_precision	0.1111111111111111
overall_recall	0.3333333333333333
metrics_per_class	
0	
precision	0.3333333333333333
recall	1.0
f1-score	0.5
support	10
1	
precision	0.0
recall	0.0
f1-score	0.0
support	9
2	
precision	0.0
recall	0.0
f1-score	0.0
support	11
accuracy	0.3333333333333333
macro avg	
precision	0.1111111111111111
recall	0.3333333333333333
f1-score	0.1666666666666666
support	30

weighted avg	
precision	0.1111111111111111
recall	0.3333333333333333
f1-score	0.1666666666666666
support	30
('ClassLabels', 'SamplingAttack')	
overall_accuracy	0.3333333333333333
overall_precision	0.1111111111111111
overall_recall	0.3333333333333333
metrics_per_class	
0	
precision	0.3333333333333333
recall	1.0
f1-score	0.5
support	10
1	
precision	0.0
recall	0.0
f1-score	0.0
support	9
2	
precision	0.0
recall	0.0
f1-score	0.0
support	11
accuracy	0.3333333333333333
macro avg	
precision	0.1111111111111111
recall	0.3333333333333333
f1-score	0.1666666666666666
support	30
weighted avg	
precision	0.1111111111111111
recall	0.3333333333333333
f1-score	0.1666666666666666

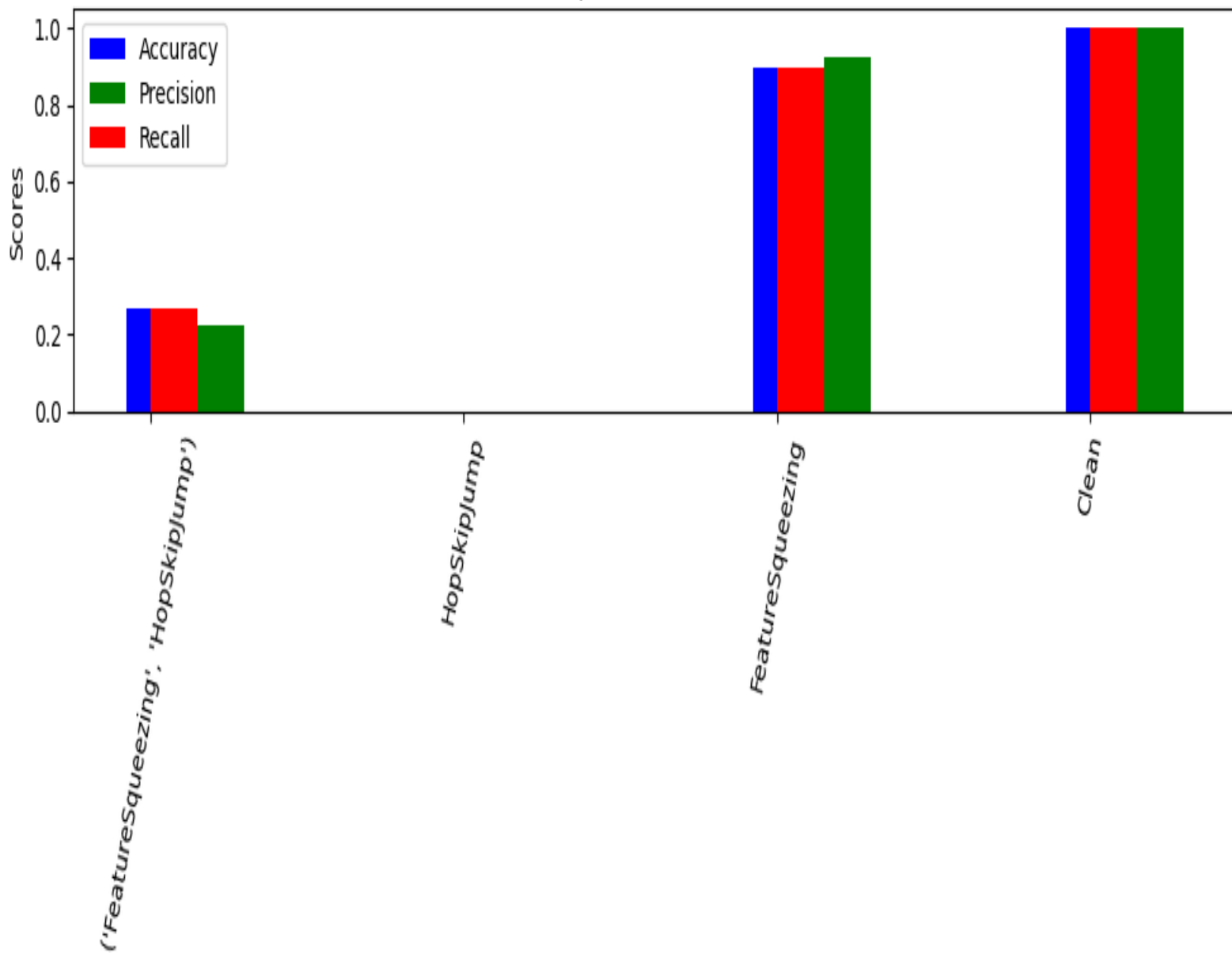
Comparison of Methods



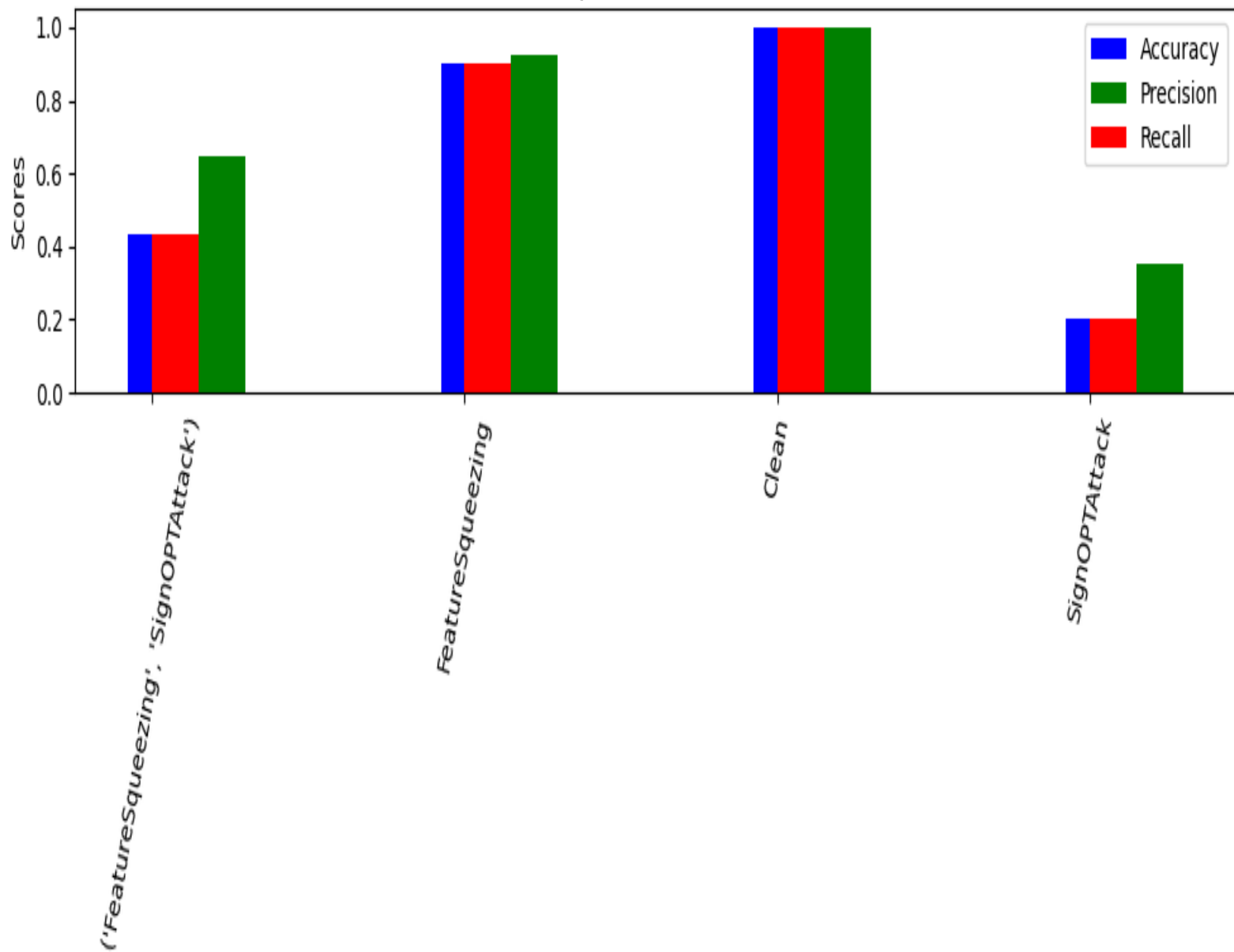
Comparison of Methods



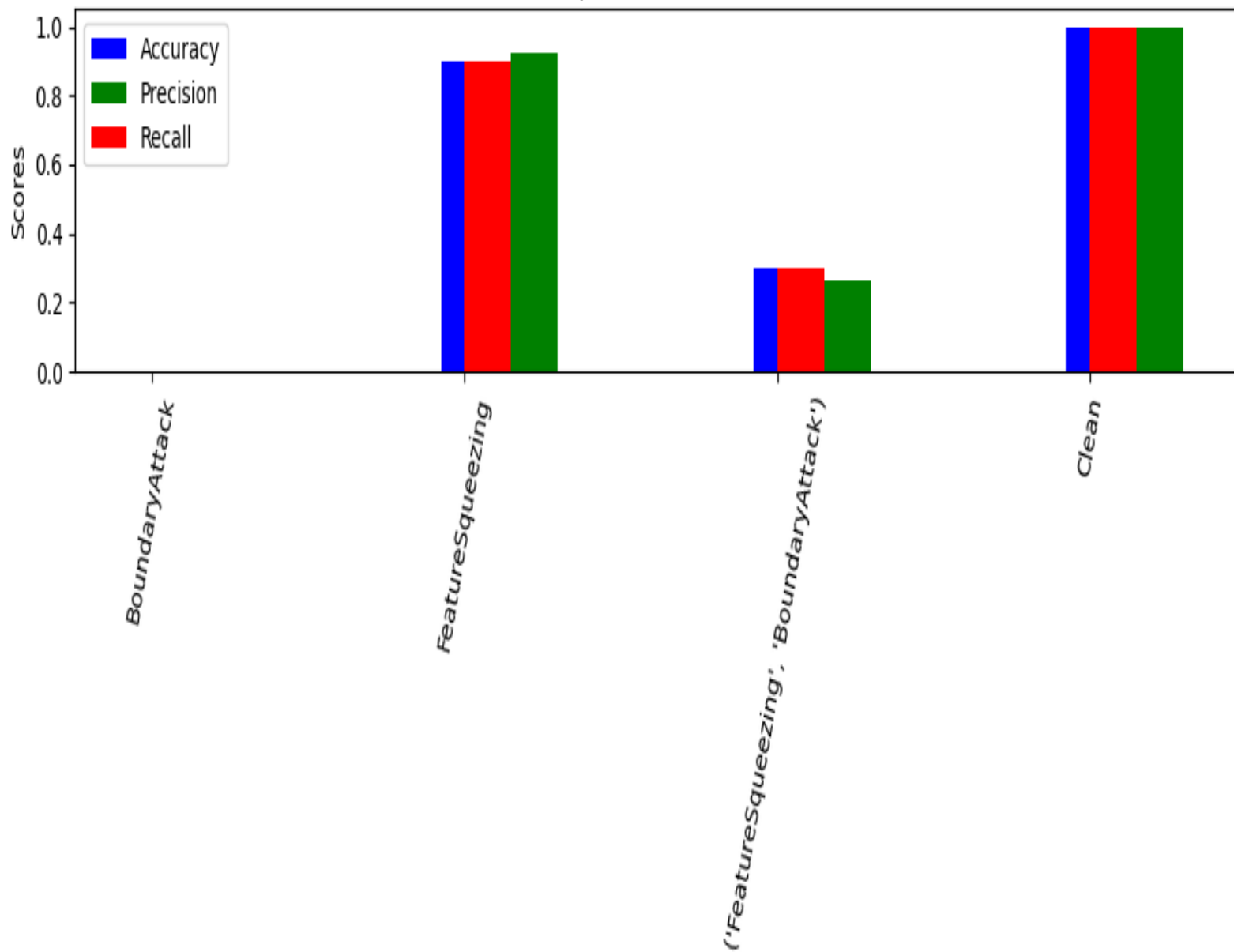
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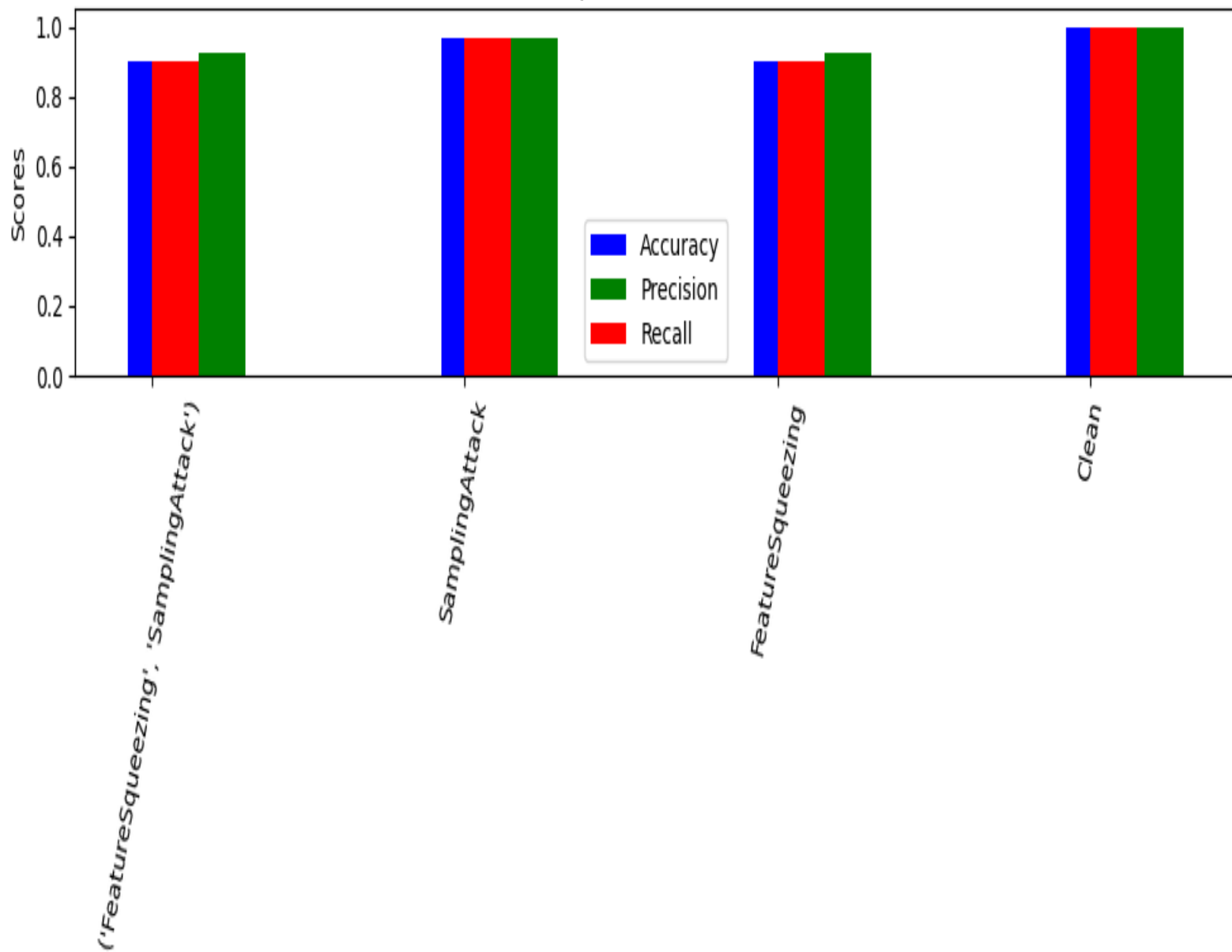
Comparison of Methods



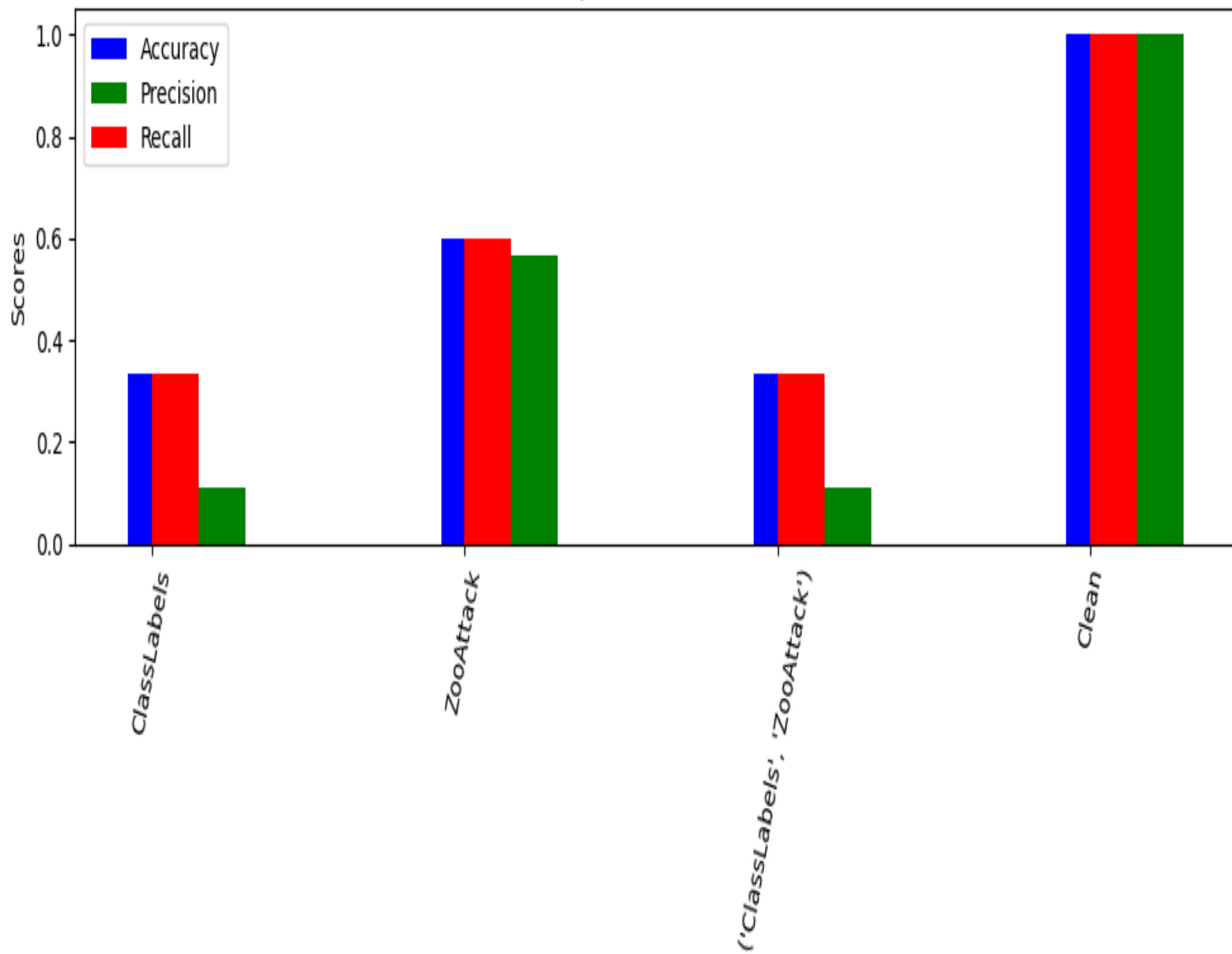
Comparison of Methods



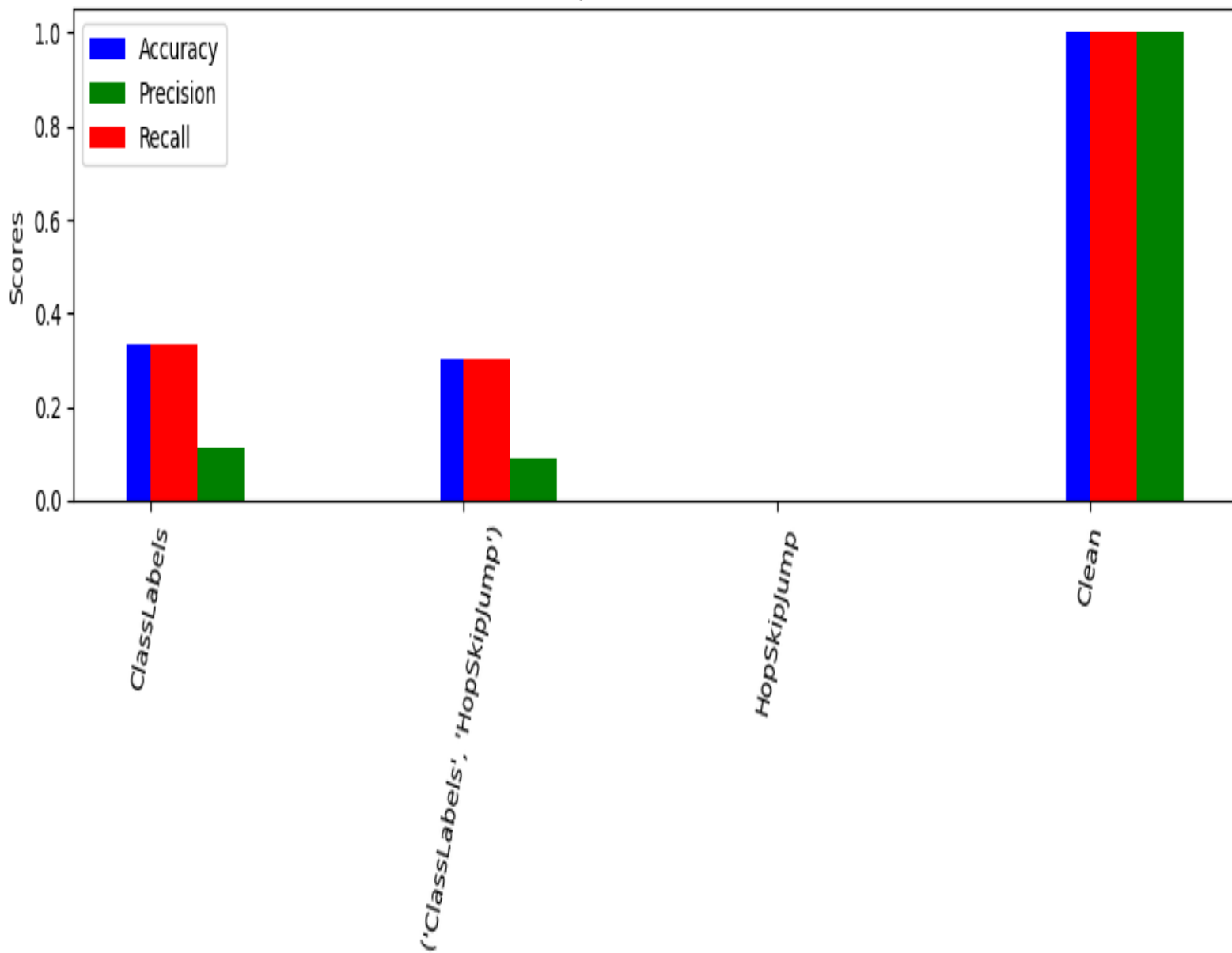
Comparison of Methods



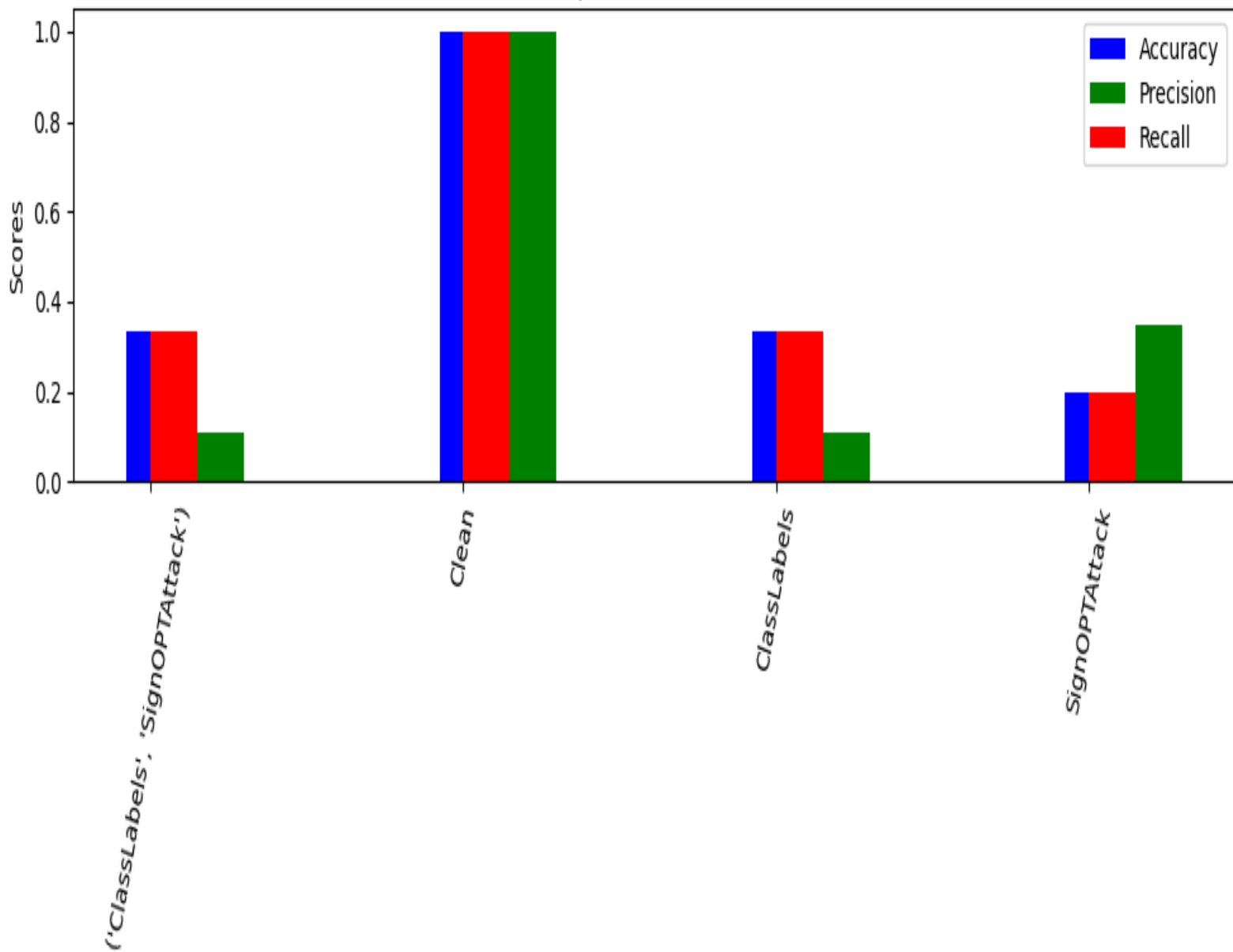
Comparison of Methods



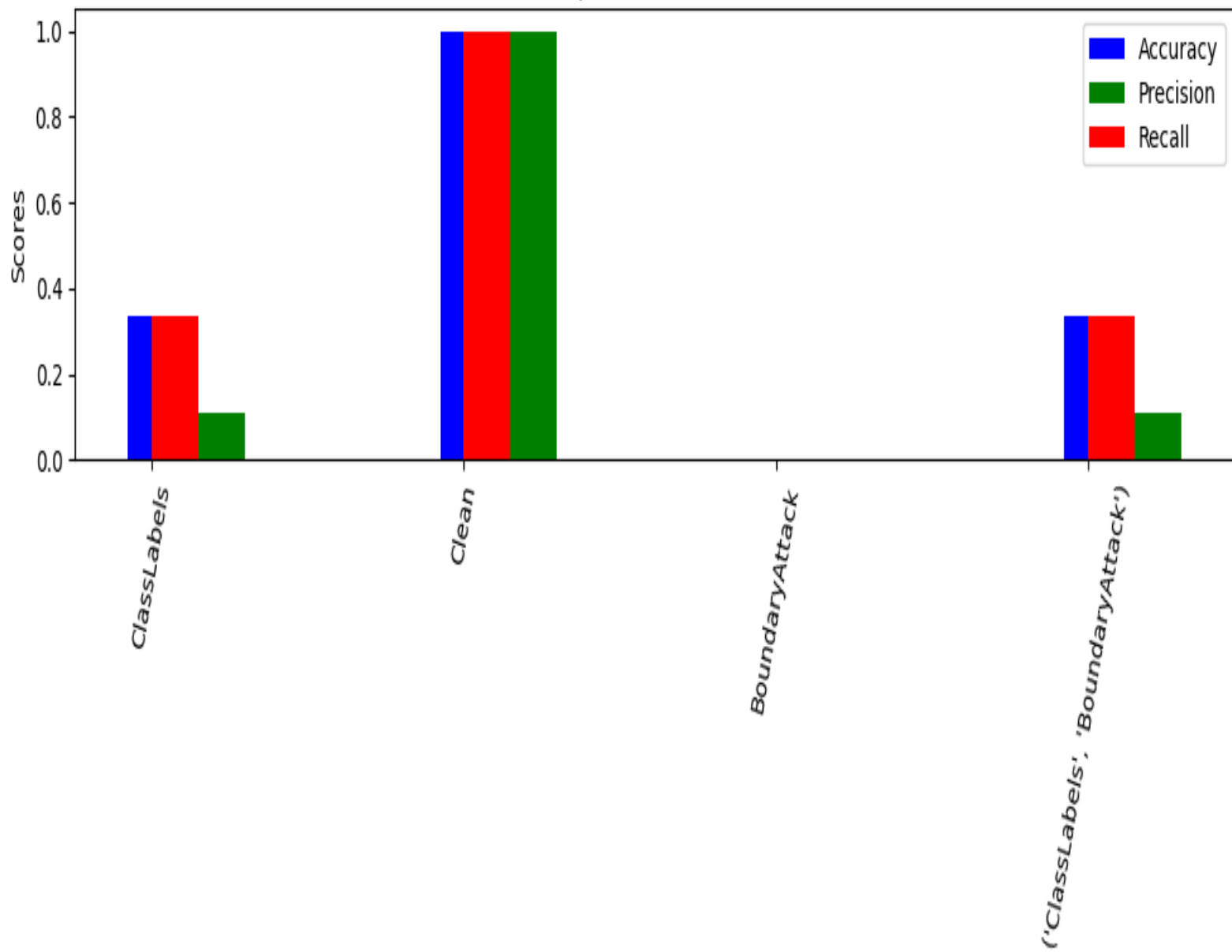
Comparison of Methods

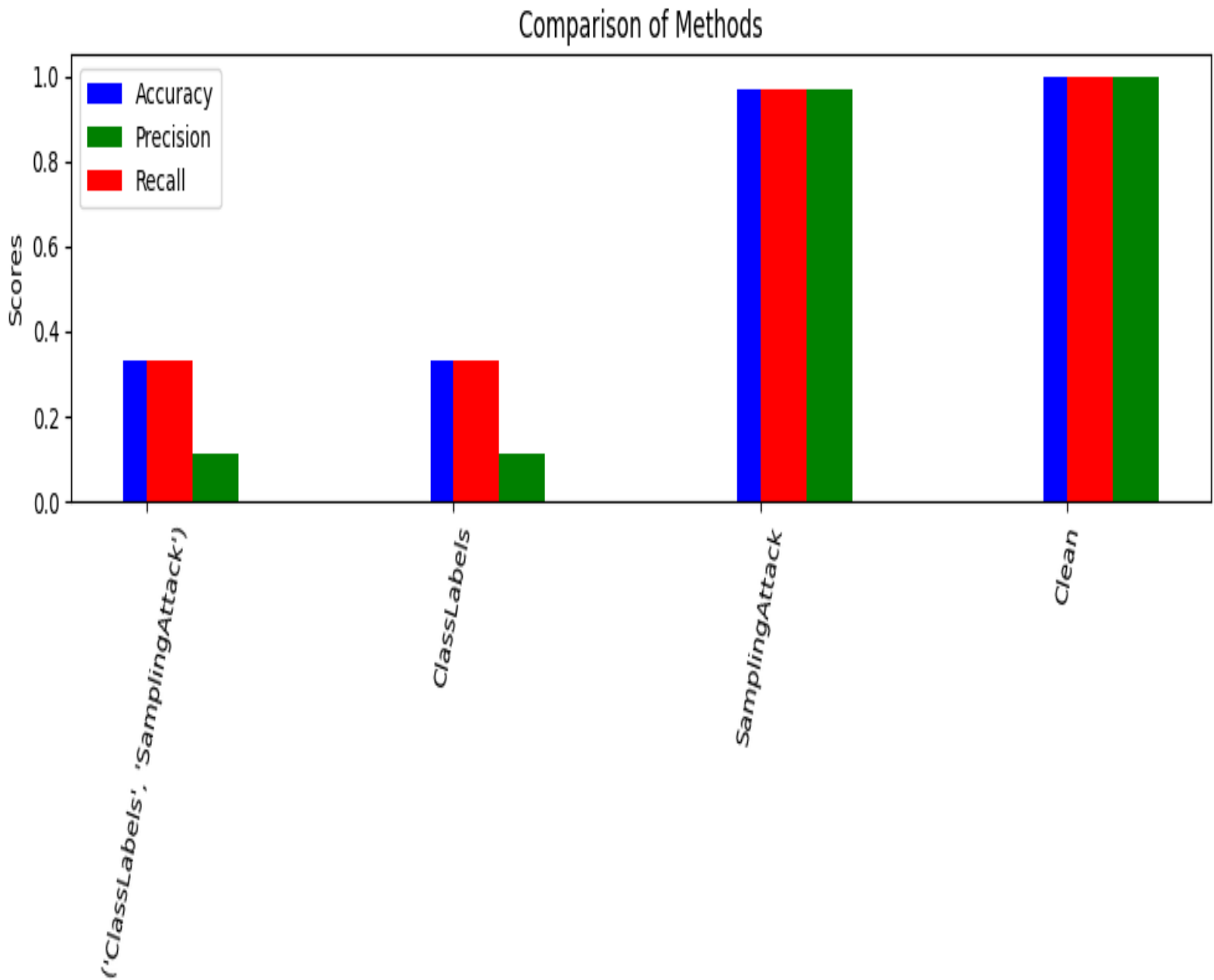


Comparison of Methods



Comparison of Methods





Recommendations:

According to the Results of the automation:

The recommended action is to use FeatureSqueezin against ZooAttack

The recommended action is to use FeatureSqueezin against ZooAttack

The first recommended action is to use ClassLabels against HopSkipJump

The second recommended action is to use FeatureSqueezing against HopSkipJump

The recommended action is to use FeatureSqueezing against ZooAttack

The first recommended action is to use ClassLabels against HopSkipJump

The second recommended action is to use FeatureSqueezing against HopSkipJump

The first recommended action is to use FeatureSqueezing against SignOPTAttack

The second recommended action is to use ClassLabels against SignOPTAttack

The recommended action is to use FeatureSqueezing against ZooAttack

The first recommended action is to use ClassLabels against HopSkipJump

The second recommended action is to use FeatureSqueezing against HopSkipJump

The first recommended action is to use FeatureSqueezing against SignOPTAttack

The second recommended action is to use ClassLabels against SignOPTAttack

The first recommended action is to use ClassLabels against BoundaryAttack

The second recommended action is to use FeatureSqueezing against BoundaryAttack

The recommended action is to use FeatureSqueezing against ZooAttack

The first recommended action is to use ClassLabels against HopSkipJump

The second recommended action is to use FeatureSqueezing against HopSkipJump

The first recommended action is to use FeatureSqueezing against SignOPTAttack

The second recommended action is to use ClassLabels against SignOPTAttack

The first recommended action is to use ClassLabels against BoundaryAttack

The second recommended action is to use FeatureSqueezing against BoundaryAttack

The first recommended action is to use FeatureSqueezing against SamplingAttack

The second recommended action is to use ClassLabels against SamplingAttack