

# Classification Results Report

**File: MachineLearningCVE\Friday-WorkingHours-Afternoon-DDos.pcap\_ISCX.csv, Task: Multi-Class, M**

Accuracy: 0.9975414737867948  
Precision: 0.9975421481937432  
Recall: 0.9975414737867948  
F1-Score: 0.9975411992490907

Confusion Matrix:  
[19332, 73]  
[38, 25706]

**File: MachineLearningCVE\Friday-WorkingHours-Afternoon-DDos.pcap\_ISCX.csv, Task: Multi-Class, M**

Accuracy: 0.9999335533455891  
Precision: 0.9999335547678885  
Recall: 0.9999335533455891  
F1-Score: 0.9999335535563415

Confusion Matrix:  
[19404, 1]  
[2, 25742]

**File: MachineLearningCVE\Friday-WorkingHours-Afternoon-DDos.pcap\_ISCX.csv, Task: Resampled M**

Accuracy: 0.9967253376995497  
Precision: 0.9967309653164125  
Recall: 0.9967253376995497  
F1-Score: 0.9967253096904023

Confusion Matrix:  
[19381, 97]  
[31, 19579]

**File: MachineLearningCVE\Friday-WorkingHours-Afternoon-DDos.pcap\_ISCX.csv, Task: Resampled M**

Accuracy: 0.9998465002046664  
Precision: 0.9998465212487072  
Recall: 0.9998465002046664  
F1-Score: 0.9998465002561057

Confusion Matrix:  
[19477, 1]  
[5, 19605]

**File: MachineLearningCVE\Friday-WorkingHours-Afternoon-DDos.pcap\_ISCX.csv, Task: Binary Classifi**

Accuracy: 1.0  
Precision: 1.0  
Recall: 1.0  
F1-Score: 1.0

Confusion Matrix:  
[45149]

**File: MachineLearningCVE\Friday-WorkingHours-Afternoon-DDos.pcap\_ISCX.csv, Task: Binary Classification**

Accuracy: 1.0  
Precision: 1.0  
Recall: 1.0  
F1-Score: 1.0

Confusion Matrix:  
[45149]

**File: MachineLearningCVE\Friday-WorkingHours-Afternoon-PortScan.pcap\_ISCX.csv, Task: Multi-Class**

Accuracy: 0.9978008168394596  
Precision: 0.9978013730547796  
Recall: 0.9978008168394596  
F1-Score: 0.9978009178093274

Confusion Matrix:  
[25481, 51]  
[75, 31687]

**File: MachineLearningCVE\Friday-WorkingHours-Afternoon-PortScan.pcap\_ISCX.csv, Task: Multi-Class**

Accuracy: 0.9998952769923553  
Precision: 0.9998952802625609  
Recall: 0.9998952769923553  
F1-Score: 0.9998952773944836

Confusion Matrix:  
[25530, 2]  
[4, 31758]

**File: MachineLearningCVE\Friday-WorkingHours-Afternoon-PortScan.pcap\_ISCX.csv, Task: Resampled**

Accuracy: 0.9605018131921984  
Precision: 0.9633551145123919  
Recall: 0.9605018131921984  
F1-Score: 0.9604385386452606

Confusion Matrix:  
[23461, 2009]  
[6, 25539]

**File: MachineLearningCVE\Friday-WorkingHours-Afternoon-PortScan.pcap\_ISCX.csv, Task: Resampled**

Accuracy: 0.999843183377438  
Precision: 0.9998432110884181  
Recall: 0.999843183377438  
F1-Score: 0.9998431834023838

Confusion Matrix:  
[25469, 1]  
[7, 25538]

**File: MachineLearningCVE\Friday-WorkingHours-Afternoon-PortScan.pcap\_ISCX.csv, Task: Binary Classification**

Accuracy: 1.0  
Precision: 1.0  
Recall: 1.0  
F1-Score: 1.0

**File: MachineLearningCVE\Friday-WorkingHours-Afternoon-PortScan\_ISCX.csv, Task: Binary Classification, Model: RandomForestClassifier**

Accuracy: 1.0  
Precision: 1.0  
Recall: 1.0  
F1-Score: 1.0

Confusion Matrix:  
[57294]

**File: MachineLearningCVE\Friday-WorkingHours-Morning.pcap\_ISCX.csv, Task: Multi-Class, Model: RandomForestClassifier**

Accuracy: 0.985473866045489  
Precision: 0.9920426849967918  
Recall: 0.985473866045489  
F1-Score: 0.9880018906951167

Confusion Matrix:  
[37351, 482]  
[73, 301]

**File: MachineLearningCVE\Friday-WorkingHours-Morning.pcap\_ISCX.csv, Task: Multi-Class, Model: RandomForestClassifier**

Accuracy: 0.9994503624990185  
Precision: 0.9994467452334206  
Recall: 0.9994503624990185  
F1-Score: 0.9994455489670756

Confusion Matrix:  
[37829, 4]  
[17, 357]

**File: MachineLearningCVE\Friday-WorkingHours-Morning.pcap\_ISCX.csv, Task: Resampled Multi-Class, Model: RandomForestClassifier**

Accuracy: 0.9695044472681067  
Precision: 0.9701667721023466  
Recall: 0.9695044472681067  
F1-Score: 0.969528620957148

Confusion Matrix:  
[399, 19]  
[5, 364]

**File: MachineLearningCVE\Friday-WorkingHours-Morning.pcap\_ISCX.csv, Task: Resampled Multi-Class, Model: RandomForestClassifier**

Accuracy: 0.9911054637865311  
Precision: 0.9911100591692587  
Recall: 0.9911054637865311  
F1-Score: 0.9911061556710784

Confusion Matrix:  
[414, 4]  
[3, 366]

**File: MachineLearningCVE\Friday-WorkingHours-Morning.pcap\_ISCX.csv, Task: Binary Classification, Model: RandomForestClassifier**

Accuracy: 1.0  
Precision: 1.0  
Recall: 1.0  
F1-Score: 1.0

**File: MachineLearningCVE\Friday-WorkingHours-Morning.pcap\_ISCX.csv, Task: Binary Classification,**

Accuracy: 1.0  
Precision: 1.0  
Recall: 1.0  
F1-Score: 1.0

Confusion Matrix:  
[38207]

**File: MachineLearningCVE\Monday-WorkingHours.pcap\_ISCX.csv, Task: Multi-Class, Model: MLP**

Accuracy: 1.0  
Precision: 1.0  
Recall: 1.0  
F1-Score: 1.0

Confusion Matrix:  
[105984]

**File: MachineLearningCVE\Monday-WorkingHours.pcap\_ISCX.csv, Task: Multi-Class, Model: RF**

Accuracy: 1.0  
Precision: 1.0  
Recall: 1.0  
F1-Score: 1.0

Confusion Matrix:  
[105984]

**File: MachineLearningCVE\Monday-WorkingHours.pcap\_ISCX.csv, Task: Resampled Multi-Class, Model: MLP**

Accuracy: 1.0  
Precision: 1.0  
Recall: 1.0  
F1-Score: 1.0

Confusion Matrix:  
[105984]

**File: MachineLearningCVE\Monday-WorkingHours.pcap\_ISCX.csv, Task: Resampled Multi-Class, Model: RF**

Accuracy: 1.0  
Precision: 1.0  
Recall: 1.0  
F1-Score: 1.0

Confusion Matrix:  
[105984]

**File: MachineLearningCVE\Monday-WorkingHours.pcap\_ISCX.csv, Task: Binary Classification, Model: MLP**

Accuracy: 1.0  
Precision: 1.0  
Recall: 1.0  
F1-Score: 1.0

Confusion Matrix:  
[105984]

**File: MachineLearningCVE\Monday-WorkingHours.pcap\_ISCX.csv, Task: Binary Classification, Model:**

Accuracy: 1.0  
Precision: 1.0  
Recall: 1.0  
F1-Score: 1.0

Confusion Matrix:  
[105984]

**File: MachineLearningCVE\Thursday-WorkingHours-Afternoon-Infiltration.pcap\_ISCX.csv, Task: Mult**

Accuracy: 0.9998787269797821  
Precision: 0.9997574686667096  
Recall: 0.9998787269797821  
F1-Score: 0.9998180941466824

Confusion Matrix:  
[57714, 0]  
[7, 0]

**File: MachineLearningCVE\Thursday-WorkingHours-Afternoon-Infiltration.pcap\_ISCX.csv, Task: Mult**

Accuracy: 0.99991337641413  
Precision: 0.9999003864782491  
Recall: 0.99991337641413  
F1-Score: 0.9999015652326201

Confusion Matrix:  
[57713, 1]  
[4, 3]

**File: MachineLearningCVE\Thursday-WorkingHours-Afternoon-Infiltration.pcap\_ISCX.csv, Task: Resa**

Accuracy: 0.9333333333333333  
Precision: 0.9444444444444445  
Recall: 0.9333333333333333  
F1-Score: 0.934609250398724

Confusion Matrix:  
[9, 1]  
[0, 5]

**File: MachineLearningCVE\Thursday-WorkingHours-Afternoon-Infiltration.pcap\_ISCX.csv, Task: Resa**

Accuracy: 1.0  
Precision: 1.0  
Recall: 1.0  
F1-Score: 1.0

Confusion Matrix:  
[10, 0]  
[0, 5]

**File: MachineLearningCVE\Thursday-WorkingHours-Afternoon-Infiltration.pcap\_ISCX.csv, Task: Bina**

Accuracy: 1.0  
Precision: 1.0  
Recall: 1.0  
F1-Score: 1.0

**File: MachineLearningCVE\Thursday-WorkingHours-Afternoon-Infiltration.pcap\_ISCX.csv, Task: Bina**

Accuracy: 1.0  
Precision: 1.0  
Recall: 1.0  
F1-Score: 1.0

Confusion Matrix:  
[57721]

**File: MachineLearningCVE\Thursday-WorkingHours-Morning-WebAttacks.pcap\_ISCX.csv, Task: Multi-**

Accuracy: 0.9871162763397312  
Precision: 0.985242880003988  
Recall: 0.9871162763397312  
F1-Score: 0.9816242574906566

Confusion Matrix:  
[33605, 5, 0, 0]  
[289, 27, 0, 0]  
[4, 1, 0, 0]  
[138, 2, 0, 3]

**File: MachineLearningCVE\Thursday-WorkingHours-Morning-WebAttacks.pcap\_ISCX.csv, Task: Multi-**

Accuracy: 0.9953630333978987  
Precision: 0.9948707164663408  
Recall: 0.9953630333978987  
F1-Score: 0.9950175205987878

Confusion Matrix:  
[33610, 0, 0, 0]  
[6, 259, 0, 51]  
[2, 1, 2, 0]  
[10, 88, 0, 45]

**File: MachineLearningCVE\Thursday-WorkingHours-Morning-WebAttacks.pcap\_ISCX.csv, Task: Resa**

Accuracy: 0.5882352941176471  
Precision: 0.5  
Recall: 0.5882352941176471  
F1-Score: 0.5294117647058824

Confusion Matrix:  
[4, 0, 1, 0]  
[1, 3, 0, 0]  
[0, 1, 3, 0]  
[0, 4, 0, 0]

**File: MachineLearningCVE\Thursday-WorkingHours-Morning-WebAttacks.pcap\_ISCX.csv, Task: Resa**

Accuracy: 0.7647058823529411  
Precision: 0.8274509803921568  
Recall: 0.7647058823529411  
F1-Score: 0.7633986928104575

Confusion Matrix:  
[4, 0, 1, 0]  
[0, 3, 1, 0]

**File: MachineLearningCVE\Thursday-WorkingHours-Morning-WebAttacks.pcap\_ISCX.csv, Task: Binary**

Accuracy: 1.0

Precision: 1.0

Recall: 1.0

F1-Score: 1.0

Confusion Matrix:

[34074]

**File: MachineLearningCVE\Thursday-WorkingHours-Morning-WebAttacks.pcap\_ISCX.csv, Task: Binary**

Accuracy: 1.0

Precision: 1.0

Recall: 1.0

F1-Score: 1.0

Confusion Matrix:

[34074]

**File: MachineLearningCVE\Tuesday-WorkingHours.pcap\_ISCX.csv, Task: Multi-Class, Model: MLP**

Accuracy: 0.9819358166446144

Precision: 0.9646137494958321

Recall: 0.9819358166446144

F1-Score: 0.9731914687273412

Confusion Matrix:

[86408, 0, 3]

[1573, 0, 1]

[34, 0, 1163]

**File: MachineLearningCVE\Tuesday-WorkingHours.pcap\_ISCX.csv, Task: Multi-Class, Model: RF**

Accuracy: 0.9999663609248504

Precision: 0.9999663620926845

Recall: 0.9999663609248504

F1-Score: 0.999966350059833

Confusion Matrix:

[86411, 0, 0]

[1, 1573, 0]

[2, 0, 1195]

**File: MachineLearningCVE\Tuesday-WorkingHours.pcap\_ISCX.csv, Task: Resampled Multi-Class, Mod**

Accuracy: 0.9918055948007912

Precision: 0.9918230065355395

Recall: 0.9918055948007912

F1-Score: 0.9918071259436795

Confusion Matrix:

[1153, 1, 14]

[7, 1169, 1]

[4, 2, 1188]

**File: MachineLearningCVE\Tuesday-WorkingHours.pcap\_ISCX.csv, Task: Resampled Multi-Class, Model:**

Accuracy: 0.9997174343034756  
Precision: 0.9997176760192125  
Recall: 0.9997174343034756  
F1-Score: 0.9997174355698099

Confusion Matrix:

[1168, 0, 0]  
[0, 1177, 0]  
[1, 0, 1193]

**File: MachineLearningCVE\Tuesday-WorkingHours.pcap\_ISCX.csv, Task: Binary Classification, Model:**

Accuracy: 1.0  
Precision: 1.0  
Recall: 1.0  
F1-Score: 1.0

Confusion Matrix:

[89182]

**File: MachineLearningCVE\Tuesday-WorkingHours.pcap\_ISCX.csv, Task: Binary Classification, Model:**

Accuracy: 1.0  
Precision: 1.0  
Recall: 1.0  
F1-Score: 1.0

Confusion Matrix:

[89182]

**File: MachineLearningCVE\Wednesday-workingHours.pcap\_ISCX.csv, Task: Multi-Class, Model: MLP**

Accuracy: 0.7514237662497023  
Precision: 0.7996311923598778  
Recall: 0.7514237662497023  
F1-Score: 0.7043738738595584

Confusion Matrix:

[88004, 0, 159, 0, 3, 4]  
[2014, 0, 3, 0, 0, 0]  
[30093, 0, 16054, 0, 0, 0]  
[1046, 0, 5, 39, 0, 0]  
[1111, 0, 0, 0, 3, 0]  
[0, 0, 0, 0, 0, 3]

**File: MachineLearningCVE\Wednesday-workingHours.pcap\_ISCX.csv, Task: Multi-Class, Model: RF**

Accuracy: 0.9994081174525953  
Precision: 0.9994081694412291  
Recall: 0.9994081174525953  
F1-Score: 0.9994080604155567

Confusion Matrix:

[88133, 0, 36, 1, 0, 0]  
[3, 2010, 4, 0, 0, 0]  
[18, 5, 46124, 0, 0, 0]  
[1, 0, 0, 1081, 8, 0]



**File: MachineLearningCVE\Wednesday-workingHours.pcap\_ISCX.csv, Task: Resampled Multi-Class, M**

Accuracy: 0.35714285714285715  
Precision: 0.2857142857142857  
Recall: 0.35714285714285715  
F1-Score: 0.3095238095238095

Confusion Matrix:  
[1, 0, 0, 2, 0, 0]  
[2, 0, 1, 0, 0, 0]  
[0, 0, 1, 0, 0, 0]  
[1, 0, 0, 0, 1, 0]  
[2, 0, 0, 0, 0, 0]  
[0, 0, 0, 0, 0, 3]

**File: MachineLearningCVE\Wednesday-workingHours.pcap\_ISCX.csv, Task: Resampled Multi-Class, M**

Accuracy: 0.7857142857142857  
Precision: 0.7714285714285715  
Recall: 0.7857142857142857  
F1-Score: 0.753061224489796

Confusion Matrix:  
[3, 0, 0, 0, 0, 0]  
[0, 2, 0, 0, 1, 0]  
[0, 0, 1, 0, 0, 0]  
[0, 0, 0, 0, 2, 0]  
[0, 0, 0, 0, 2, 0]  
[0, 0, 0, 0, 0, 3]

**File: MachineLearningCVE\Wednesday-workingHours.pcap\_ISCX.csv, Task: Binary Classification, Mo**

Accuracy: 1.0  
Precision: 1.0  
Recall: 1.0  
F1-Score: 1.0  
Confusion Matrix:  
[138541]

**File: MachineLearningCVE\Wednesday-workingHours.pcap\_ISCX.csv, Task: Binary Classification, Mo**

Accuracy: 1.0  
Precision: 1.0  
Recall: 1.0  
F1-Score: 1.0  
Confusion Matrix:  
[138541]