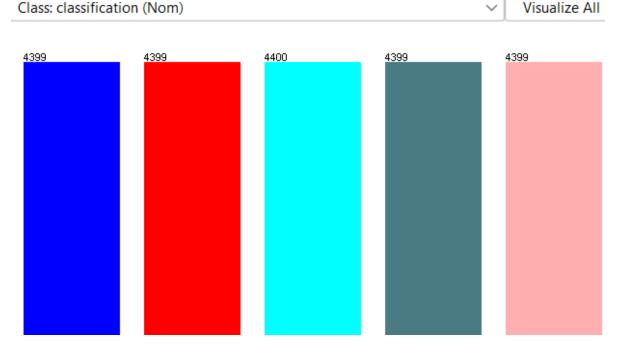
# Višeklasna klasifikacija bez benignih podataka

Current relation

Relation: ALL\_CICFLOW\_TRAIN\_MULTI\_NO\_BEN
Instances: 21996

Attributes: 79
Sum of weights: 21996

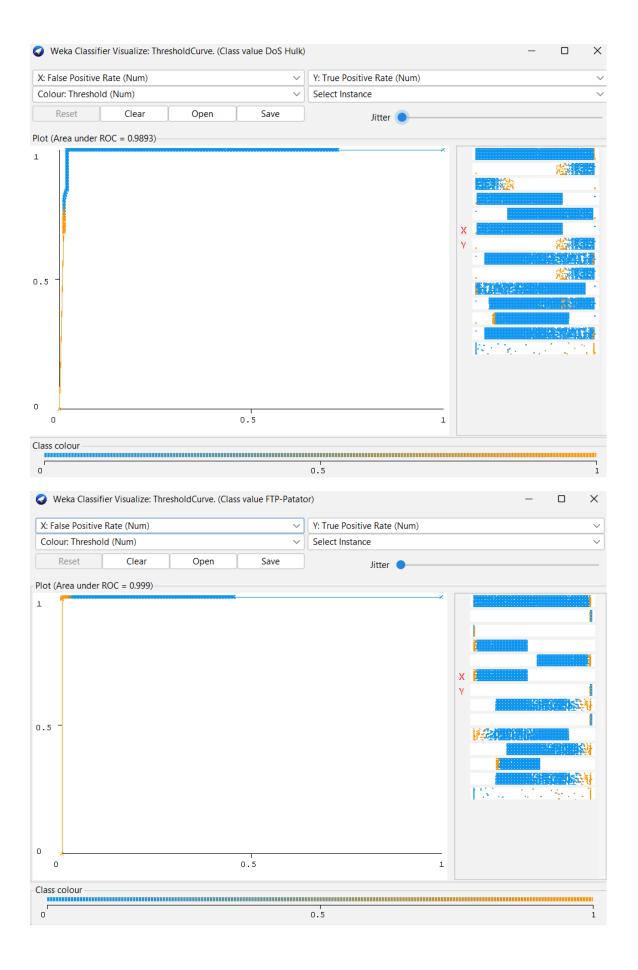
Name: lissing:	classification 0 (0%)	Distinct: 5		Type: Nominal Unique: 0 (0%)		
No.	Label		Count	Weigh	nt	
1	DoS Hulk	4399		4399		
2	FTP-Patator	4399		4399		
3	DoS Slowhttptest	4400		4400		
4	SSH-Patator	4399		4399		
5	PortScan	4399		4399		

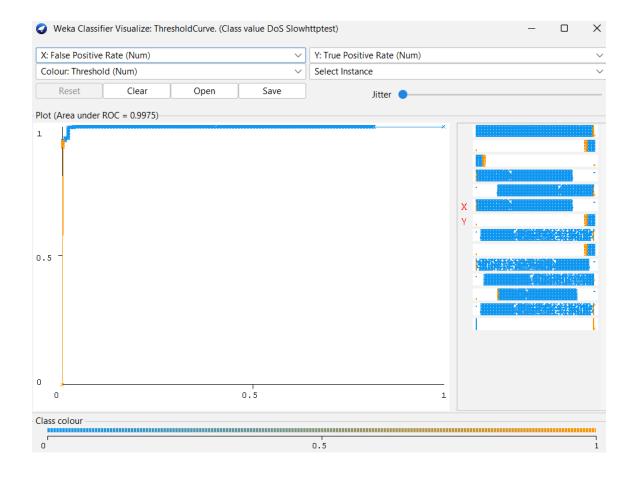


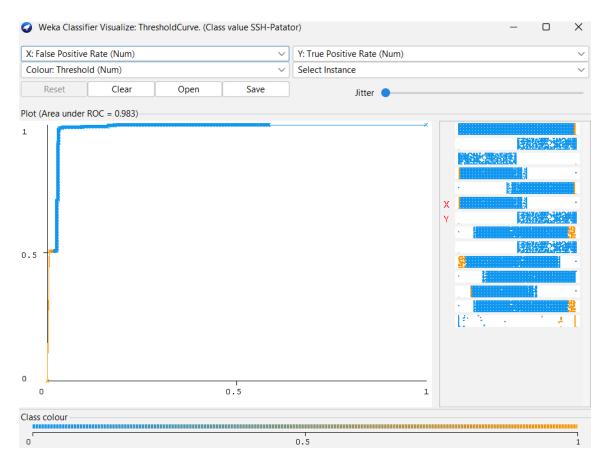
# Naive Bayes

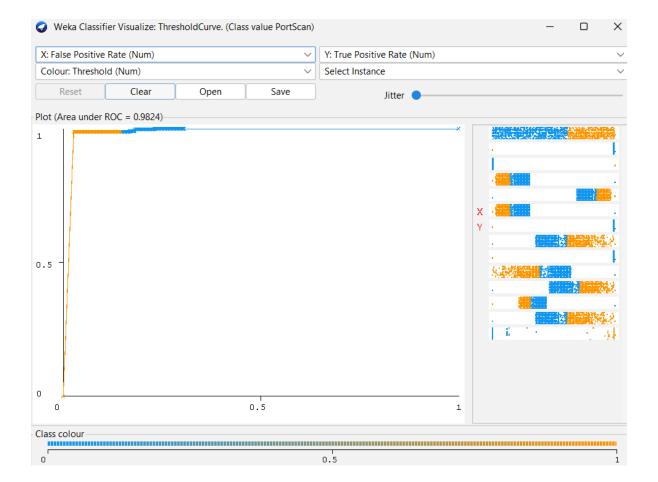
# Cross-validation

Classifier output——										
_Idle_Min										
mean			1.1	463	-0.4577		0.224	-0	.4577	-0.4556
std. dev.			1.3	068	0.0005		1.1392	0	.0005	0.0664
weight sum			4	399	4399		4400		4399	4399
precision			0.0	031	0.0031		0.0031	0	.0031	0.0031
Time taken to bu	ild model	: 0.18 se	conds							
=== Stratified o	cross-vali	dation ==	=							
=== Summary ===										
Correctly Classi	fied Inst	ances	18467		83.9562	8				
Incorrectly Clas			3529		16.0438	8				
Kappa statistic			0.79	95						
Mean absolute en	ror		0.06	37						
Root mean square	ed error		0.25	08						
Relative absolut	e error		19.91	76 <del>%</del>						
Root relative so	quared err	or	62.69	45 %						
Total Number of	Instances		21996							
=== Detailed Acc	curacy By	Class ===								
	mp pa+a	PD Data	Precision	Decall.	F-Measure	MCC	ROC Area	PRC Area	Class	
	0.759	0.013	0.935	0.759	0.838	0.809	0.989	0.927	DoS Hulk	
	0.997	0.022	0.917	0.997	0.956	0.945	0.999	0.995	FTP-Patator	
	0.947	0.004	0.985	0.947	0.966	0.958	0.998	0.984	DoS Slowhttpte	est
	0.506	0.014		0.506	0.648	0.622	0.983	0.905	SSH-Patator	
	0.988	0.147	0.627	0.988	0.767	0.724	0.982	0.891	PortScan	
Weighted Avg.	0.840	0.040	0.873	0.840	0.835	0.812	0.990	0.940		
=== Confusion Ma	trix ===									
a b c	d e		assified as							
3341 370 8		•	DoS Hulk							
0 4387 9 230 0 4166		•	FTP-Patato DoS Slowht							
	2228 2150		SSH-Patato	-						
1 11 38	4 4345		PortScan	_						
1 11 50	1 1010	, , ,	202000011							









## Test set

Corre	ctly Clas	ssified Inst	ances	4598		83.6152	8			
Incor	rectly Cl	lassified Ir	stances	901		16.3848	8			
Kappa	statisti	ic		0.79	52					
Mean a	absolute	error		0.06	56					
Root i	mean squa	ared error		0.25	46					
Relat:	ive absol	lute error		20.49	02 %					
Root :	relative	squared err	or	63.63	886 %					
Total	Number o	of Instances	3	5499						
=== De	etailed A	Accuracy By	Class ===	:						
		TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC Area	Class
		0.740	0.011	0.943	0.740	0.829	0.802	0.989	0.932	DoS Hulk
		0.998	0.035	0.876	0.998	0.933	0.918	0.999	0.996	FTP-Patator
		0.955	0.005	0.979	0.955	0.967	0.959	0.997	0.979	DoS Slowhttptest
		0.505	0.020	0.866	0.505	0.638	0.605	0.983	0.909	SSH-Patator
		0.982	0.134	0.647	0.982	0.780	0.738	0.989	0.943	PortScan
Weight	ted Avg.	0.836	0.041	0.862	0.836	0.830	0.804	0.991	0.952	
=== C	onfusion	Matrix ===								
a	b	c d e	< cl	assified as	3					
814	149	2 86 49	)   a =	Dos Hulk						
0	1098	2 0 0	)   b =	FTP-Patato	r					
48	0 105	50 0 1	L   c =	Dos slowht	tptest					
1	3	2 556 538	8   d =	SSH-Patato	r					
0	3 1	17 0 1080	)   e =	PortScan						

### Random Forest

### Cross-validation

Classifier output

```
=== Classifier model (full training set) ===
RandomForest
Bagging with 100 iterations and base learner
weka.classifiers.trees.RandomTree -K 0 -M 1.0 -V 0.001 -S 1 -do-not-check-capabilities
Time taken to build model: 3.99 seconds
=== Stratified cross-validation ===
=== Summary ===
Correctly Classified Instances 21982
                                            99.9364 %
                             14
                                             0.0636 %
Incorrectly Classified Instances
                                0.9992
Kappa statistic
Mean absolute error
                                0.0007
                               0.0152
Root mean squared error
Relative absolute error
                               0.2202 %
                               3.7934 %
Root relative squared error
Total Number of Instances
                            21996
=== Detailed Accuracy By Class ===
             TP Rate FP Rate Precision Recall F-Measure MCC ROC Area PRC Area Class
             1.000 0.000 0.999 1.000 0.999 0.999 1.000 1.000 DoS Hulk
             1.000 0.000 0.999
                                   1.000 0.999
                                                   0.999 1.000
                                                                   1.000
                                                                          FTP-Patator
                          0.999
                                                   0.999 1.000
             0.999
                   0.000
                                   0.999
                                           0.999
                                                                   1.000
                                                                          DoS Slowhttptest
                                                   0.999
                                                                  1.000
                                                          1.000
                                                                          SSH-Patator
             0.999
                   0.000 0.999
                                   0.999 0.999
                                                                  0.999 PortScan
             0.999 0.000 1.000
                                   0.999 1.000
                                                   1.000 1.000
Weighted Avg. 0.999 0.000 0.999
                                   0.999 0.999
                                                   0.999 1.000
                                                                  1.000
=== Confusion Matrix ===
     b
         c d e <-- classified as
4397 0
         2 0 0 | a = DoS Hulk
  2 0 4396 2 0 | c = DoS Slowhttptest
   0 3 0 4396 0 | d = SSH-Patator
   3 0 0 04396 | e = PortScan
```

## Test set

```
Classifier output
RandomForest
Bagging with 100 iterations and base learner
weka.classifiers.trees.RandomTree -K 0 -M 1.0 -V 0.001 -S 1 -do-not-check-capabilities
Time taken to build model: 3.59 seconds
=== Evaluation on test set ===
Time taken to test model on supplied test set: 0.33 seconds
=== Summary ===
Correctly Classified Instances
                               5499
                                               100
Incorrectly Classified Instances
                                0
                                                0
Kappa statistic
                                  1
                                  0.0006
Mean absolute error
Root mean squared error
                                  0.011
                                  0.1934 %
Relative absolute error
                                  2.743 %
Root relative squared error
Total Number of Instances
                               5499
=== Detailed Accuracy By Class ===
              TP Rate FP Rate Precision Recall F-Measure MCC
                                                              ROC Area PRC Area Class
              1.000 0.000 1.000 1.000 1.000
                                                      1.000 1.000
                                                                      1.000
                                                                               DoS Hulk
              1.000 0.000 1.000
                                      1.000 1.000
                                                      1.000 1.000
                                                                      1.000
                                                                               FTP-Patator
              1.000 0.000 1.000
                                                      1.000 1.000
                                                                      1.000
                                     1.000 1.000
                                                                               DoS Slowhttptest
                    0.000
                           1.000
                                      1.000 1.000
                                                       1.000 1.000
                                                                      1.000
              1.000
                                                                               SSH-Patator
                                                             1.000
                            1.000
                                      1.000 1.000
                                                       1.000
                                                                      1.000
                    0.000
              1.000
                                                                               PortScan
                           1.000
                                                       1.000 1.000
                                      1.000 1.000
                                                                      1.000
Weighted Avg.
              1.000
                    0.000
=== Confusion Matrix ===
          c d e <-- classified as
      b
 1100
      0 0 0 0 | a = DoS Hulk
   0 1100 0 0 0 | b = FTP-Patator
   0 0 1099 0 0 | c = DoS Slowhttptest
   0 0 1100 0 | d = SSH-Patator
```

0 0 0 1100 | e = PortScan

### Tree J48

### Cross-validation

```
Classifier output
   Bwd Packet Length Min > -0.093885
| PSH_Flag_Count <= -1.149342: DoS Slowhttptest (47.0/1.0)
| PSH_Flag_Count > -1.149342: PortScan (4323.0)
Number of Leaves :
Size of the tree :
Time taken to build model: 1.07 seconds
=== Stratified cross-validation ===
=== Summary ===
                                            99.9136 %
Correctly Classified Instances 21977
Incorrectly Classified Instances 19
Incorrectly Classified Instances
                                             0.0864 %
Kappa statistic
                                0.9989
Mean absolute error
                                0.0005
                                0.0186
Root mean squared error
                               0.161 %
Relative absolute error
Root relative squared error
                                4.6493 %
                             21996
Total Number of Instances
=== Detailed Accuracy By Class ===
             TP Rate FP Rate Precision Recall F-Measure MCC
                                                           ROC Area PRC Area Class
0.998 0.999 0.998 DoS Slowhttptest
=== Confusion Matrix ===
     b c d e <-- classified as
 4393 0 6 0 0 | a = DoS Hulk
   0 4398 1 0 0 | b = FTP-Patator
   5 0 4395 0 0 | c = DoS Slowhttptest
   0 0 0 4399 0 | d = SSH-Patator
   3 1 2 1 4392 | e = PortScan
```

### Test set

```
Classifier output
Number of Leaves :
                    29
Size of the tree: 57
Time taken to build model: 0.72 seconds
=== Evaluation on test set ===
Time taken to test model on supplied test set: 0.26 seconds
=== Summary ===
Correctly Classified Instances 5495
Incorrectly Classified Instances 4
                                                 99.9273 %
                                                  0.0727 %
                                   0.9991
Kappa statistic
Mean absolute error
                                   0.0004
Root mean squared error
                                   0.017
Relative absolute error
                                   0.1392 %
                                  4.2403 %
Root relative squared error
Total Number of Instances
                                5499
=== Detailed Accuracy By Class ===
              TP Rate FP Rate Precision Recall F-Measure MCC ROC Area PRC Area Class
              0.996 0.000 1.000 0.996 0.998 0.998 0.999 0.999 DoS Hulk
              1.000 0.000 1.000
                                       1.000 1.000
                                                         1.000 1.000
                                                                          1.000 FTP-Patator
                                       1.000 0.998
               1.000 0.001 0.996
                                                         0.998 1.000 0.998
                                                                                   DoS Slowhttptest
1.000 0.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 Weighted Avg. 0.999 0.000 0.999 0.999 0.999 0.999 0.999 0.999
                                                                                  SSH-Patator
                                                                                   PortScan
=== Confusion Matrix ===
      b c d e <-- classified as
 1096 0
          4 0 0 | a = DoS Hulk
                    0 | b = FTP-Patator
   0 1100 0
                0
   0 0 1099 0 0 | c = DoS Slowhttptest
      0 0 1100 0 | d = SSH-Patator
   0
   0 0 0 1100 | e = PortScan
```

## Unpruned =TRUE

```
Classifier output
| Bwd Packet Length Min > -0.093885
| PSH_Flag_Count <= -1.149342: DoS Slowhttptest (47.0/1.0)
| PSH_Flag_Count > -1.149342: PortScan (4323.0)
Number of Leaves :
                       32
Size of the tree: 63
Time taken to build model: 1.02 seconds
=== Stratified cross-validation ===
=== Summary ===
Correctly Classified Instances 21975
                                                         99.9045 %
Incorrectly Classified Instances
                                     21
                                                          0.0955 %
                                         0.9988
Kappa statistic
Mean absolute error
                                         0.0005
Root mean squared error
                                        0.0192
                                        0.1636 %
Relative absolute error
                                      4.7999 %
Root relative squared error
Total Number of Instances
                                    21996
=== Detailed Accuracy By Class ===
                 TP Rate FP Rate Precision Recall F-Measure MCC ROC Area PRC Area Class 0.998 0.000 0.998 0.998 0.998 0.998 0.999 0.997 DoS Holdon 1.000 1.000 1.000 1.000 1.000 FTP-Pa
                                                                            0.999 0.997 Dos Hulk
                                                                                                FTP-Patator
0.999 0.001 0.998 0.999 0.998 0.998 0.999 0.998

1.000 0.000 1.000 1.000 1.000 1.000 1.000 1.000 0.999

0.998 0.000 1.000 0.998 0.999 0.999 1.000 0.999

Weighted Avg. 0.999 0.000 0.999 0.999 0.999 0.999 1.000 0.999
                                                                                      0.998 DoS Slowhttptest
                                                                  1.000 1.000 1.000 SSH-Patator
                                                                  0.999 1.000 0.999 PortScan
=== Confusion Matrix ===
                 d e <-- classified as
            С
 4391
       0 8 0 0 | a = DoS Hulk
   0 4398 1 0 0 | b = FTP-Patator
   5 0 4395 0 0 | c = DoS Slowhttptest
   0 0 0 4399 0 | d = SSH-Patator
    3 1 2 1 4392 | e = PortScan
```

## Classifier output Number of Leaves : 32 Size of the tree: 63 Time taken to build model: 0.92 seconds === Evaluation on test set === Time taken to test model on supplied test set: 0.25 seconds === Summary === 4 Correctly Classified Instances 5495 99.9273 % Incorrectly Classified Instances 0.0727 % Kappa statistic 0.9991 0.0004 Mean absolute error Root mean squared error 0.017 Relative absolute error 0.128 % Root relative squared error 4.24 % 5499 Total Number of Instances === Detailed Accuracy By Class === TP Rate FP Rate Precision Recall F-Measure MCC ROC Area PRC Area Class 0.996 0.000 1.000 0.996 0.998 0.999 0.999 DoS Hulk 1.000 0.000 1.000 1.000 1.000 1.000 1.000 1.000 FTP-Patator 0.998 1.000 0.998 DoS Slowhttptest 1.000 0.001 0.996 1.000 0.998 1.000 0.000 1.000 1.000 1.000 1.000 1.000 1.000 SSH-Patator 1.000 0.000 1.000 1.000 1.000 1.000 1.000 PortScan 0.999 0.000 0.999 0.999 0.999 0.999 1.000 0.999 Weighted Avg. === Confusion Matrix ===

b c d e <-- classified as

0 0 1100 0 | d = SSH-Patator 0 0 0 1100 | e = PortScan

b = FTP-Patator

0 | c = DoS Slowhttptest

1096 0 4 0 0 | a = DoS Hulk

0 0 |

0

0

0 1099

0 1100

0

## OneR algoritam

OneR je jednostavan klasifikator koji bira jedan atribut i za njega definiše pravila na osnovu kojih se radi klasifikacija.

#### Test set

```
Classifier output
              user supplied test set: size unknown (reading incrementally)
Test mode:
=== Classifier model (full training set) ===
Fwd Header Length:
        < -0.8190870005420706 -> PortScan
        < -0.7789051948693494
                                 -> SSH-Patator
        < -0.7186324863602676 -> PortScan
        < -0.6483143264330056 -> DoS Hulk
        < -0.6181779721784646 -> FTP-Patator
        < -0.5779961665057434 -> SSH-Patator
        < -0.3670416867239571 -> DoS Hulk
        < -0.3469507838875965 -> DoS Slowhttptest
        < -0.296723526796695 -> DoS Hulk
        < -0.2665871725421541 -> DoS Slowhttptest
        < -0.1259508526876299 -> DoS Hulk
        < -0.0656781441785481 -> DoS Slowhttptest
        < 0.1151399813486972 -> DoS Hulk
< 0.1352308841850578 -> DoS Slowhttptest
        < 0.3160490097123032
                                -> DoS Hulk
        < 0.3361399125486638
                               -> DoS Slowhttptest
        < 0.4265489753122865 -> DoS Hulk
        < 0.4566853295668274
                                -> DoS Slowhttptest
        < 0.5169580380759091
                                -> DoS Hulk
        < 0.5370489409122698
                                -> FTP-Patator
        < 1.1397760260030876
                                -> DoS Hulk
        < 1.9534575908756922
                               -> DoS Slowhttptest
        < 2.154366619239298
                                -> SSH-Patator
        < 2.2347302305847405
                                -> DoS Slowhttptest
        < 2.3150938419301825 -> SSH-Patator
< 2.4155483561119855 -> DoS Slowhttptest
        >= 2.4155483561119855 -> SSH-Patator
(19249/21996 instances correct)
```

Correctly Classi	fied Inst	ances	4827		87.7796	8			
Incorrectly Clas	sified In	stances	672		12.2204	8			
Kappa statistic			0.84	72					
Mean absolute er	ror		0.04	89					
Root mean squared error			0.22	11					
Relative absolute error			15.27	55 %					
Root relative squared error			55.27	3 %					
Total Number of		5499							
=== Detailed Acc	uracy By	Class ===	:						
	TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC Area	Class
	0.681	0.013	0.932	0.681	0.787	0.757	0.834	0.698	DoS Hulk
	0.996	0.101	0.711	0.996	0.830	0.797	0.947	0.709	FTP-Patator
	0.736	0.003	0.982	0.736	0.841	0.821	0.866	0.775	DoS Slowhttptest
	0.985	0.028	0.897	0.985	0.938	0.924	0.978	0.886	SSH-Patator
	0.991	0.007	0.972	0.991	0.982	0.977	0.992	0.965	PortScan
Weighted Avg.	0.878	0.031	0.899	0.878	0.876	0.855	0.924	0.807	
=== Confusion Ma	trix ===								
a b c	d e	< cl	assified as	;					
749 310 9	1 31	a =	DoS Hulk						
3 1096 0	1 0	b =	FTP-Patato	r					

39 128 809 123 0 | c = DoS Slowhttptest
4 8 5 1083 0 | d = SSH-Patator
9 0 1 0 1090 | e = PortScan

# Cross-validation

Correctly Classi	19244		87.4886	8					
Incorrectly Clas	ssified In	stances	2752		12.5114	8			
Kappa statistic			0.84	36					
Mean absolute error			0.05						
Root mean squared error		0.2237							
Relative absolute error		15.6392 %							
Root relative so	or	55.92	71 %						
Total Number of	Instances		21996						
=== Detailed Acc									
			Precision			MCC		PRC Area	
	0.675	0.012	0.933	0.675	0.783	0.754	0.832	0.695	DoS Hulk
	0.997	0.102	0.710	0.997	0.829	0.796	0.948	0.708	FTP-Patator
	0.719	0.004	0.976	0.719	0.828	0.806	0.857	0.758	DoS Slowhttptest
	0.990	0.031	0.887	0.990	0.936	0.921	0.979	0.880	SSH-Patator
	0.994	0.006	0.975	0.994	0.984	0.980	0.994	0.970	PortScan
Weighted Avg.	0.875	0.031	0.896	0.875	0.872	0.852	0.922	0.802	
=== Confusion Ma	atrix ===								

a	b	c	d	е		< classified as
2970	1251	64	3	111	1	a = DoS Hulk
7	4386	0	6	0	I	b = FTP-Patator
171	521	3164	544	0	1	c = DoS Slowhttptest
12	22	10	4353	2	1	d = SSH-Patator
23	1	4	0	4371	1	e = PortScan

# K Nearest Neighbors (kNN) -IBk

# Cross-validation KNN=1

Correctly Classified Instance	s 21976		99.9091	8			
Incorrectly Classified Instan	ces 20		0.0909	8			
Kappa statistic	0.998	89					
Mean absolute error	0.000	04					
Root mean squared error	0.019	91					
Relative absolute error	0.13	44 %					
Root relative squared error	4.76	73 <del>%</del>					
Total Number of Instances	21996						
=== Detailed Accuracy By Clas	s ===						
TP Rate FP	Rate Precision	Recall	F-Measure	MCC	ROC Area	PRC Area	Class
1.000 0.0	00 0.998	1.000	0.999	0.999	1.000	0.998	DoS Hulk
0.999 0.0	00 1.000	0.999	0.999	0.999	0.999	0.999	FTP-Patator
0.999 0.0	00 1.000	0.999	0.999	0.999	0.999	0.999	DoS Slowhttptest
0.999 0.0	00 0.998	0.999	0.999	0.998	0.999	0.998	SSH-Patator
	00 0.999		0.999	0.999	1.000	0.999	PortScan
Weighted Avg. 0.999 0.0	00 0.999	0.999	0.999	0.999	0.999	0.998	
=== Confusion Matrix ===							
abcde <	classified as						
4397 0 0 1 1	a = DoS Hulk						
0 4394 1 4 0	b = FTP-Patato	r					
1 0 4395 2 2	c = DoS Slowhtt	tptest					
3 2 0 4394 0	d = SSH-Patato	r					
3 0 0 0 4396	e = PortScan						

# Cross-validation KNN=3

Correct	-lv Clas	sified Ins	+=nces	21963		99.85	Q.			
	-	assified Ins		33		0.15				
	statisti		.nscances	0.99	201	0.13	7			
	scacisci osolute									
				0.0006 0.0208						
	Root mean squared error Relative absolute error				208 399 %					
	Root relative squared error				393 %					
Total Number of Instances		)S	21996							
=== Det	tailed A	ccuracy By	y Class ===	=						
				Precision					PRC Area	
		0.999	0.001	0.997	0.999	0.998	0.998	1.000	0.999	DoS Hulk
		1.000	0.000	0.999		0.999	0.999	1.000	0.999	FTP-Patator
		0.998		0.999	0.998	0.998	0.998	1.000	0.999	DoS Slowhttptest
		0.997		0.999	0.997	0.998	0.997	0.999	0.998	SSH-Patator
		0.999	0.000	0.999	0.999	0.999	0.999	1.000	0.999	PortScan
Weighte	ed Avg.	0.998	0.000	0.999	0.998	0.998	0.998	1.000	0.999	
=== Con	nrusion	Matrix ===	-							
a	b	c d	e < c]	lassified as	3					
4395	0	2 0	2   a =	Dos Hulk						
0 4	1397	0 1	1   b =	FTP-Patato	or					
2	1 438	9 5	3   c =	= Dos Slowht	tptest					
7	5	0 4387	0   d =	= SSH-Patato	or					
3	0	1 0 439	95   e=	= PortScan						

# Test set KNN=1

Correctly Classified Instances			5498		99.9818	8			
Incorrectly Clas	sified In	stances	1		0.0182	8			
Kappa statistic			0.99	98					
Mean absolute er	ror		0.00	01					
Root mean square	d error		0.00	85					
Relative absolute error			0.04	14 %					
Root relative squared error			2.13	21 %					
Total Number of Instances			5499						
=== Detailed Acc	uracy By	Class ===	:						
	TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC Area	Class
	1.000	0.000	1.000	1.000	1.000	1.000	1.000	1.000	DoS Hulk
	1.000	0.000	1.000	1.000	1.000	1.000	1.000	1.000	FTP-Patator
	1.000	0.000	0.999	1.000	1.000	0.999	1.000	0.999	DoS Slowhttptest
	0.999	0.000	1.000	0.999	1.000	0.999	1.000	0.999	SSH-Patator
	1.000	0.000	1.000	1.000	1.000	1.000	1.000	1.000	PortScan
Weighted Avg.	1.000	0.000	1.000	1.000	1.000	1.000	1.000	1.000	
=== Confusion Ma	trix ===								
a b c	d €	< cl	assified as						
1100 0 0	0 0	)   a =	DoS Hulk						
0 1100 0	0 0	)   b =	FTP-Patato	r					
0 0 1099	0 0	)   c =	Dos Slowht	tptest					
0 0 1	1099 0	)   d =	SSH-Patato	r					
0 0 0	0 1100	)   e =	PortScan						

# Test set KNN=3

Corre	rectly Classified Instances			ances	5493		99.8909	8				
Incor	rectl	y Cla	ssifie	d Ins	stances	6		0.1091	8			
Kappa	stat	istic				0.99	86					
Mean	absol	ute e	rror			0.00	04					
Root	Root mean squared error				0.01	.68						
Relat	Relative absolute error		0.11	.98 %								
Root	Root relative squared error		or	4.19	25 %							
Total	Total Number of Instances			5499								
=== D	etail	ed Ac	curacy	ву	Class ===	=						
			TP R	ate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC Area	Class
			0.99	9	0.000	0.999	0.999	0.999	0.999	1.000	1.000	DoS Hulk
			1.00	0	0.000	0.998	1.000	0.999	0.999	1.000	1.000	FTP-Patator
			0.99	9	0.000	0.999	0.999	0.999	0.999	1.000	0.999	DoS Slowhttptest
			0.99	6	0.000	0.998	0.996	0.997	0.997	1.000	0.999	SSH-Patator
			1.00	0	0.000	1.000	1.000	1.000	1.000	1.000	1.000	PortScan
Weigh	ted A	.vg.	0.99	9	0.000	0.999	0.999	0.999	0.999	1.000	1.000	
=== C	onfus	ion M	atrix	===								
a	b	С	d	е	< cl	lassified as	3					
1099	0	0	1	0	a =	Dos Hulk						
0	1100	0	0	0	b =	FTP-Patato	r					
0	0	1098	1	0	c=	Dos Slowht	tptest					
1	2	1	1096	0	d =	SSH-Patato	r					
0	0	0	0	1100	I e =	PortScan						