

CYBER SECURITY

Digital Assignment – 1

Harshil Gupta -17BCE1112

Shekhar Gaur – 17BCE1183

Shikhar Chaudhary – 17BCE1238

Mohika Thampi -17BCE1079

Pranjal Sachan -17BCE1027

Classification Algorithm Used:

- Decision Tree
- Gaussian Process
- Gradient Boosting

ATTACKS :

1.) UDP

S.No	Model	Accuracy
1.	Decision Tree	0.9952
2.	Gaussian Process	0.915846
3.	Gradient Boosting	0.999726

DecesionTree: 0.99952

Gradient Boosting: 0.9997266666666667

Gaussian Classifier: 0.9158466666666667

2.) TCPSYN

S.No	Model	Accuracy
1.	Decision Tree	0.999311
2.	Gaussian Process	0.950137
3.	Gradient Boosting	0.999625

DecesionTree: 0.9993119266055046
Gradient Boosting: 0.9996253822629969
Gaussian Classifier: 0.9501376146788991
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3.) ICMP

S.No	Model	Accuracy
1.	Decision Tree	0.999418
2.	Gaussian Process	0.9436692
3.	Gradient Boosting	0.999677

DecesionTree: 0.9994186046511628
Gradient Boosting: 0.9996770025839793
Gaussian Classifier: 0.9436692506459948
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4.) LAND

S.No	Model	Accuracy
1.	Decision Tree	0.834027777
2.	Gaussian Process	0.553125
3.	Gradient Boosting	0.6758333

DecesionTree: 0.8340277777777778
Gradient Boosting: 0.6758333333333333
Gaussian Classifier: 0.553125
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5.) TCPSYNACK

S.No	Model	Accuracy
1.	Decision Tree	0.772717
2.	Gaussian Process	0.511521
3.	Gradient Boosting	0.606811

DecesionTree: 0.7727173913043478

Gradient Boosting: 0.6068115942028985

Gaussian Classifier: 0.5115217391304347

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