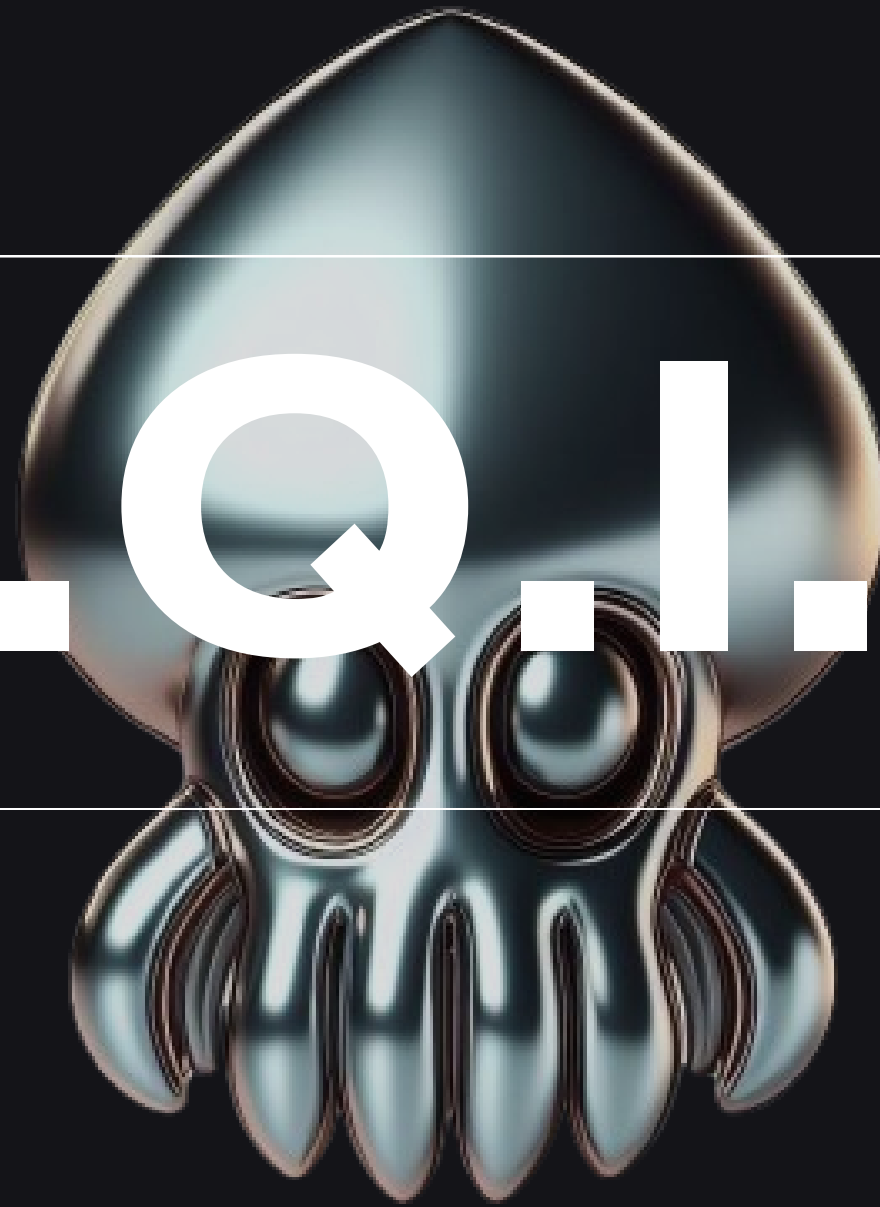


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S.Q.I.D



+++++

OWASP TOP 10



A01:21

Broken Access Control

A02:21

Cryptographic Failures

A03:21

Injection

A04:21

Insecure Design

A05:21

Security Misconfiguration

A06:21

**Vulnerable and Outdated
Components**

A07:21

**Identification and
Authentication Failures**

A08:21

**Software and Data Integrity
Failures**

A09:21

**Security Logging and
Monitoring Failures**

A10:21

Server-Side Request Forgery



WHAT IS AN SQL INJECTION ?





HACKER





HACKER



WEBSITE





HACKER

LOGIN



WEBSITE

**NORMAL
ACCOUNT**



DATABASE





HACKER

LOGIN



WEBSITE

**ADMIN
ACCOUNT**



DATABASE





S.Q.I.D GOAL





HACKER

LOGIN



WEBSITE

ASK
S.Q.I.D



ACCOUNT



DATABASE





DATASET EXAMINATION



30905
unique values

Label



Valid 	30.9k	100%
Mismatched 	0	0%
Missing 	0	0%
Unique	30.9k	
Most Common	#NAME?	0%

Valid <div></div>	30.9k	100%
Mismatched <div></div>	0	0%
Missing <div></div>	0	0%
Mean	0.37	
Std. Deviation	0.48	
Quantiles	0	Min
	0	25%
	0	50%
	1	75%
	1	Max

DATA CLEANING



01 DATA CLEANING

deletion of all unnecessary
lines

02 CASE CLEANING

turn everything in lower case

03 SPACE CLEANING

removal of outer spaces

04 SELECT CLEANING

deletion of the first select
instruction



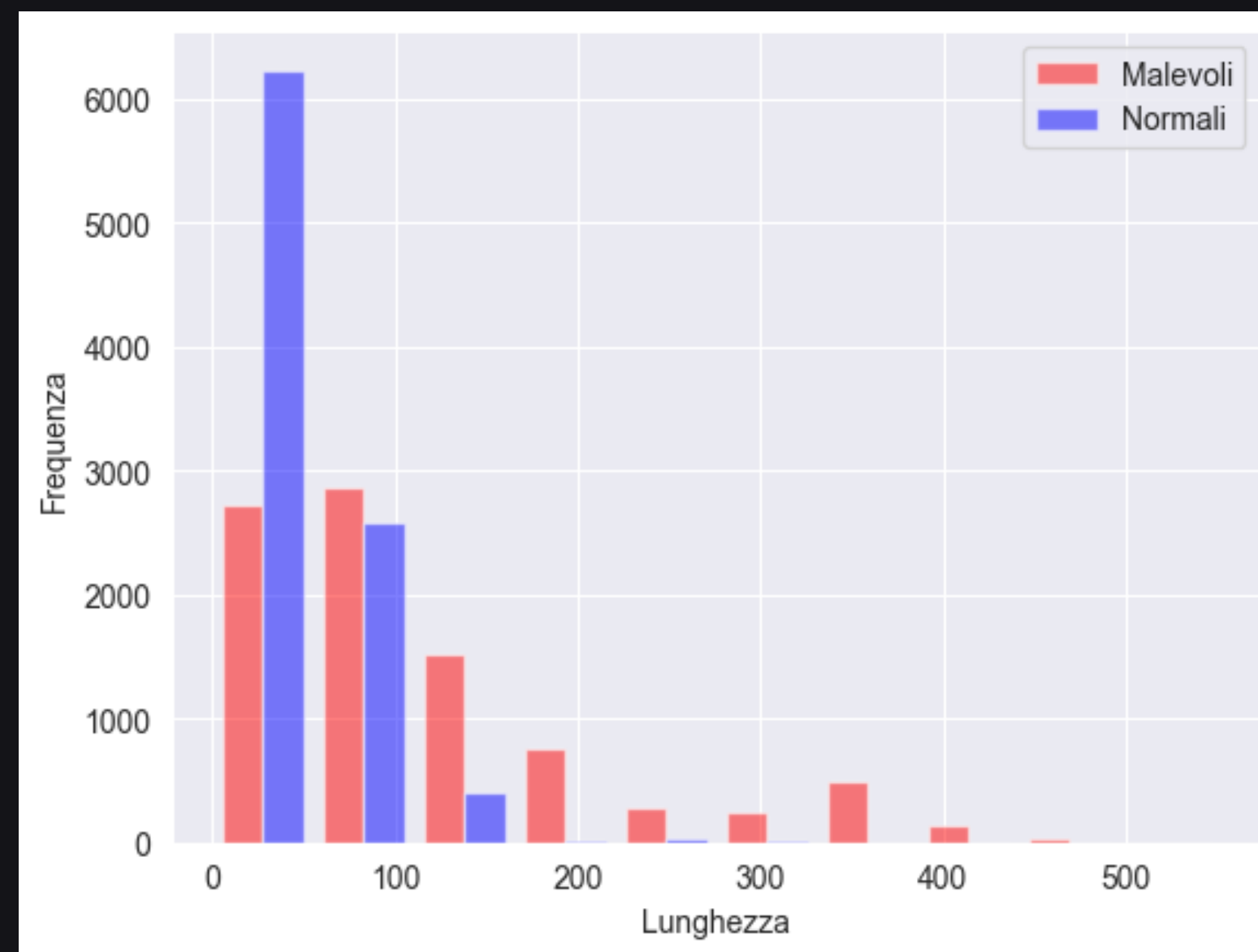
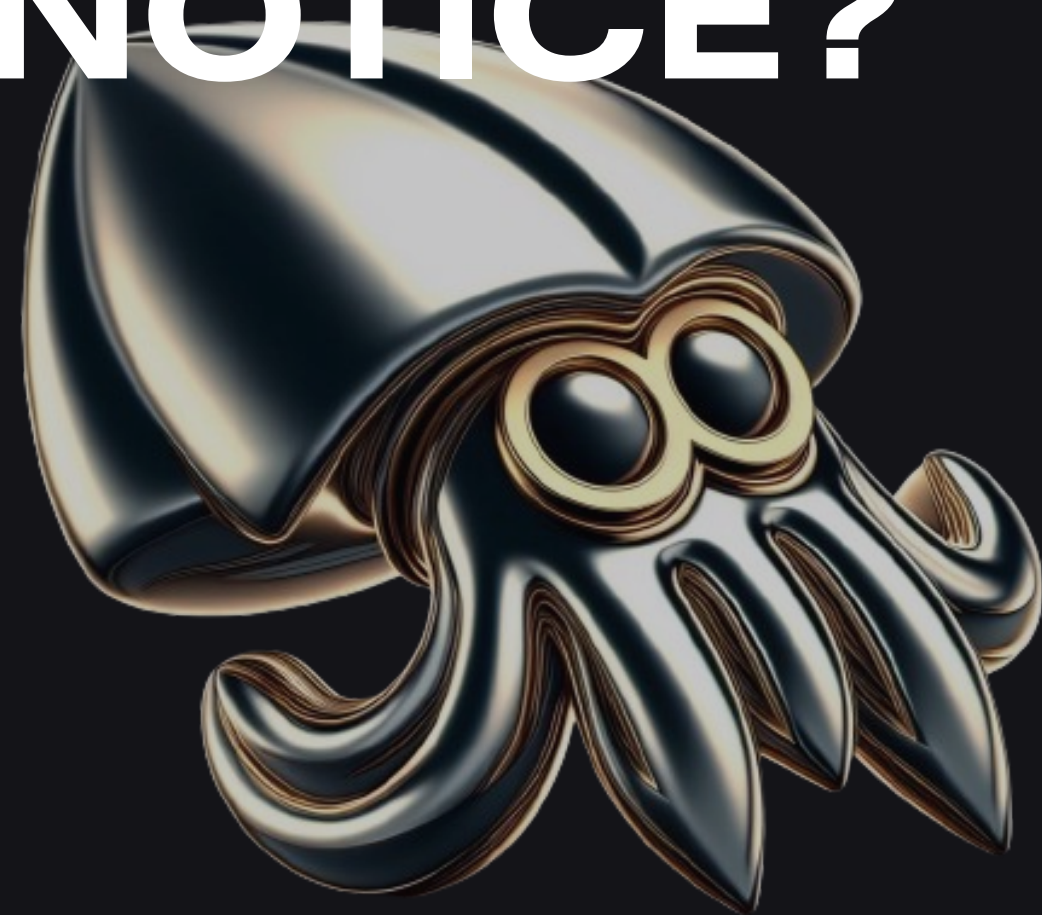


FEATURE ENGINEERING



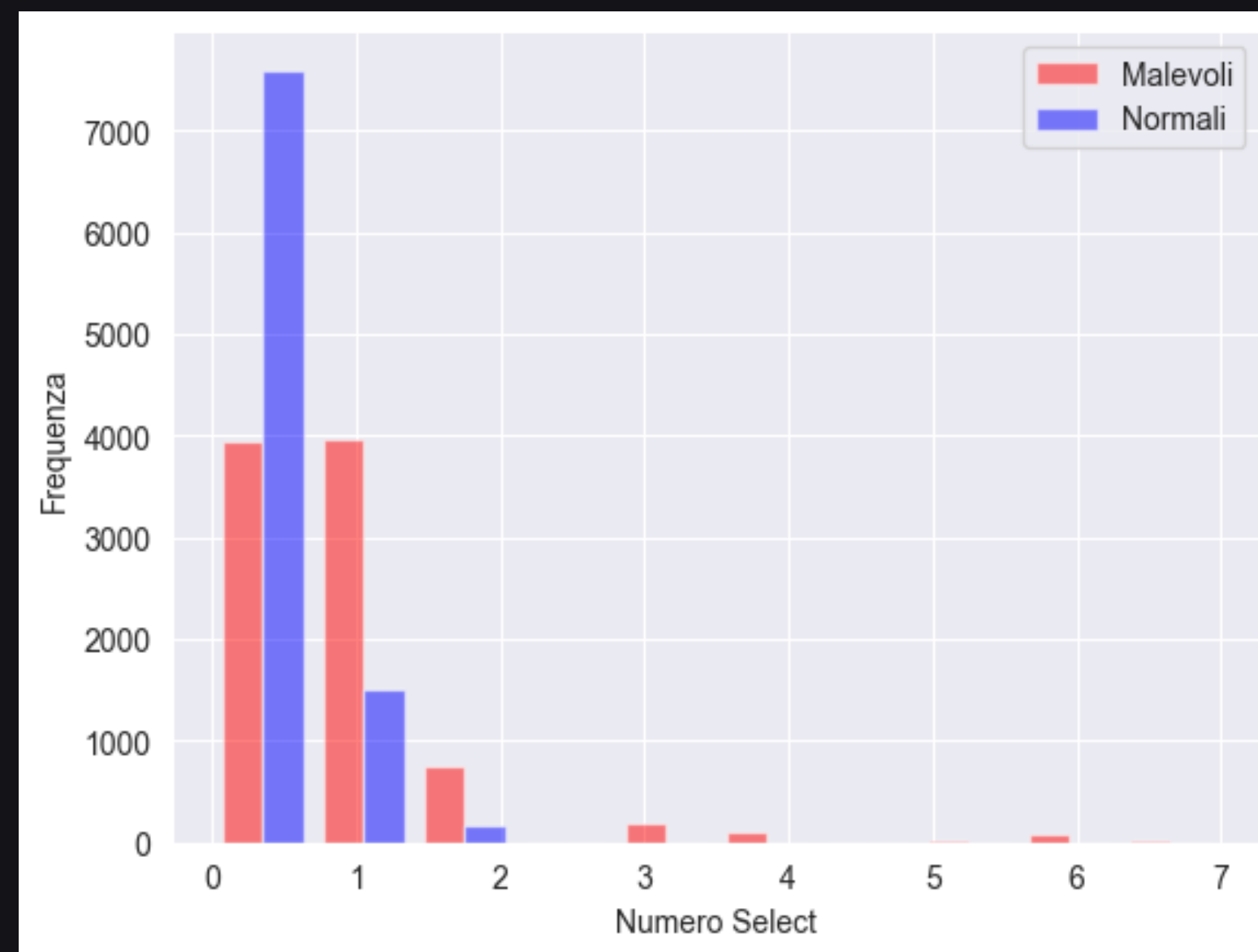


DID YOU NOTICE?





DID YOU NOTICE?



MODEL CLASSES USED

01 NAIVE BAYES



02 SVM



03 DECISION TREE



04 RANDOM FOREST



05 NEAREST NEIGHBOURS



Multinomial Naive Bayes	
1734	5
79	1847

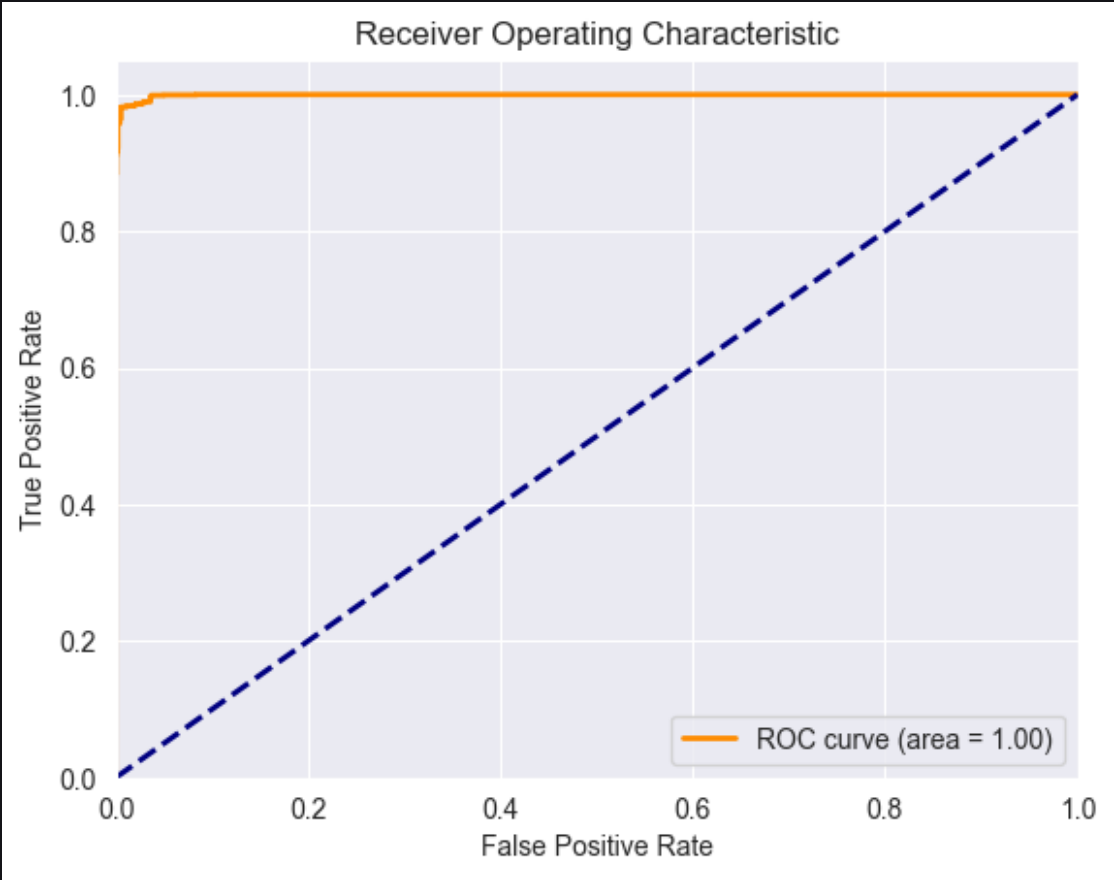
Linear Support Vector Machines	
1812	27
1	1825

K Nerest Classifier	
1807	212
6	1640

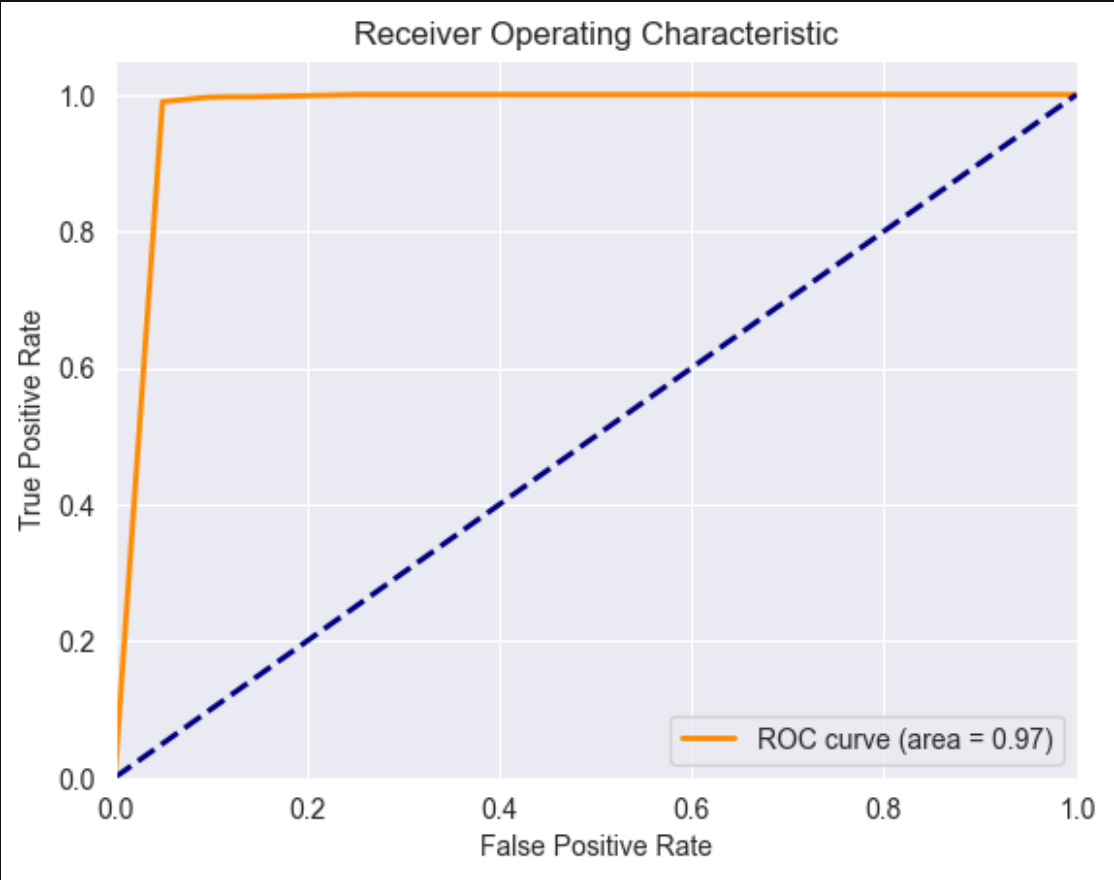
Decision Tree Classifier	
1807	22
6	1830

Random Forest Classifier	
1812	29
1	1823

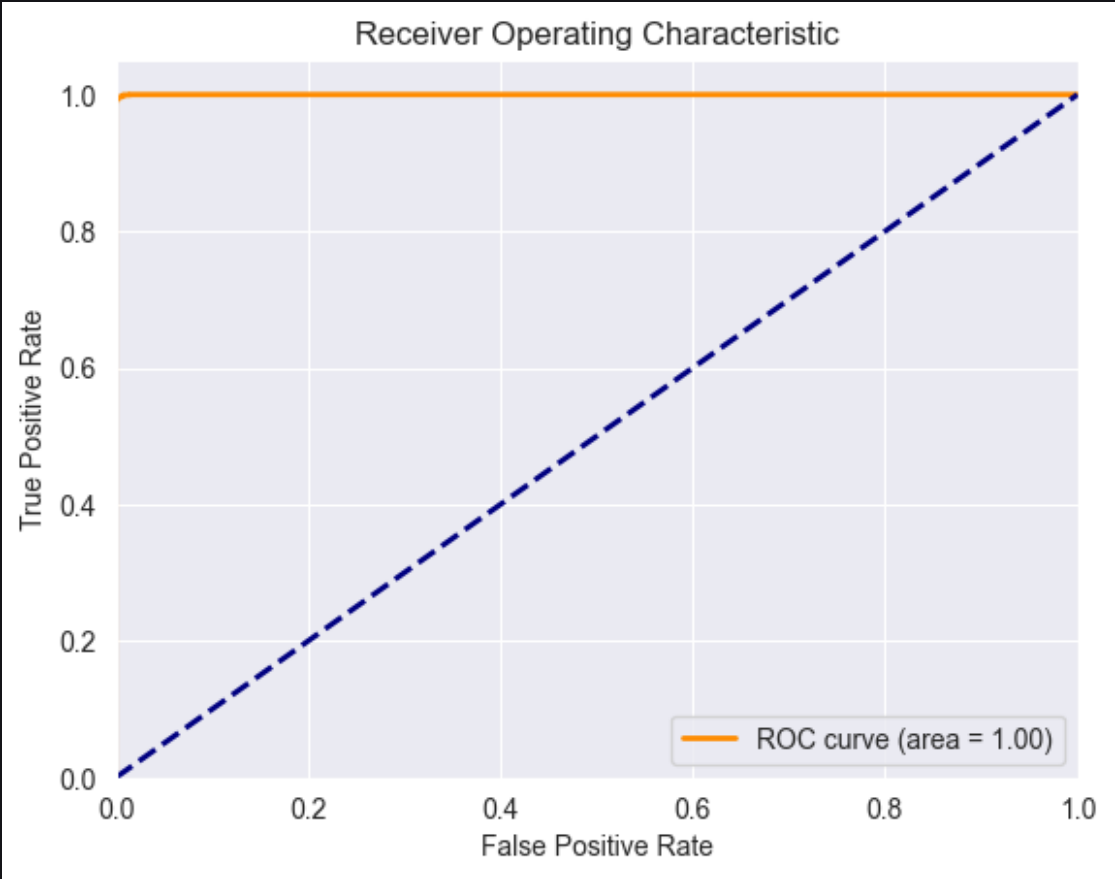
MULTINOMIAL



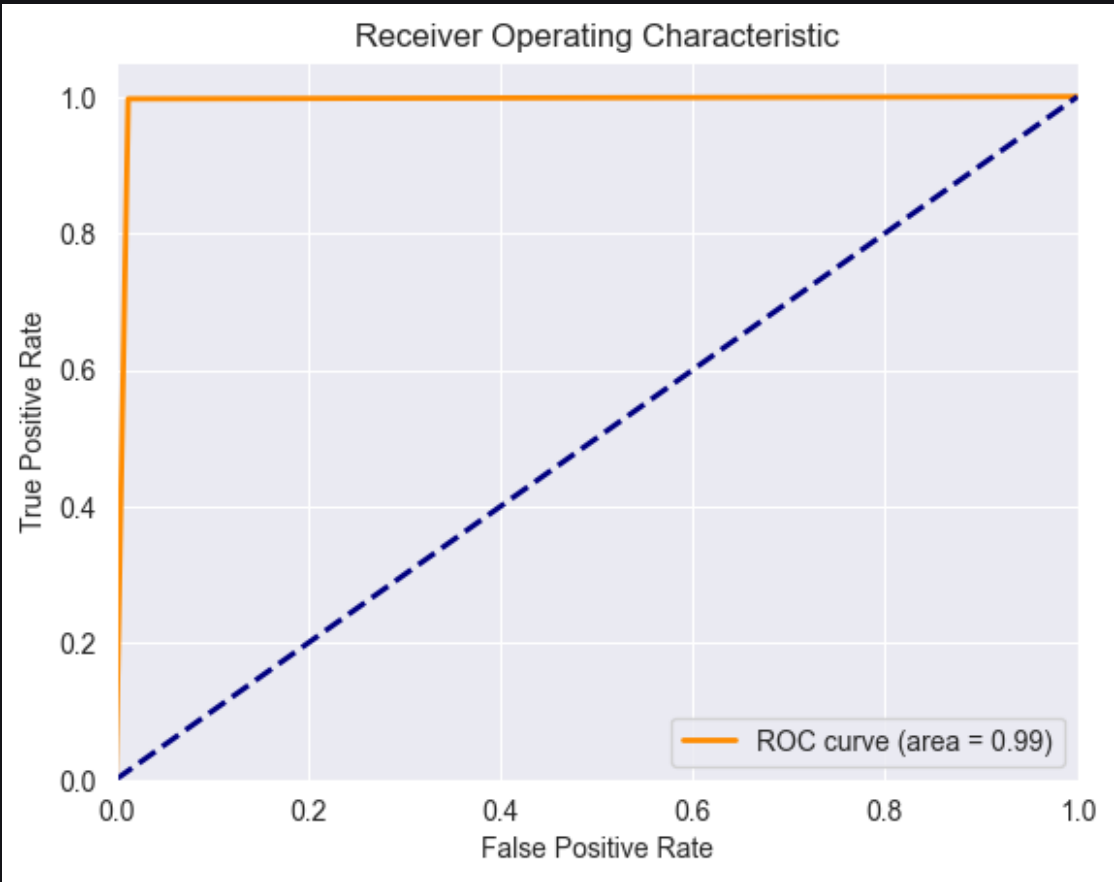
K NEAREST



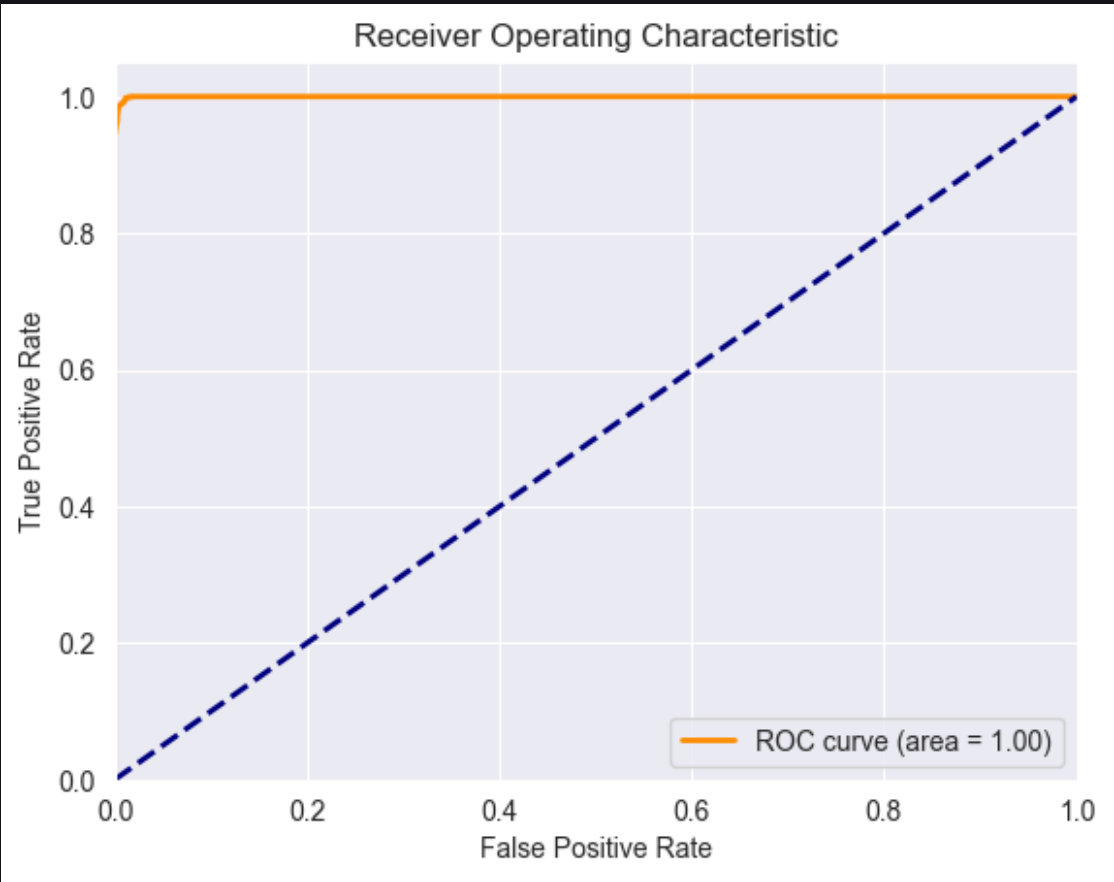
LINEAR SVM



DECISION TREE



RANDOM FOREST



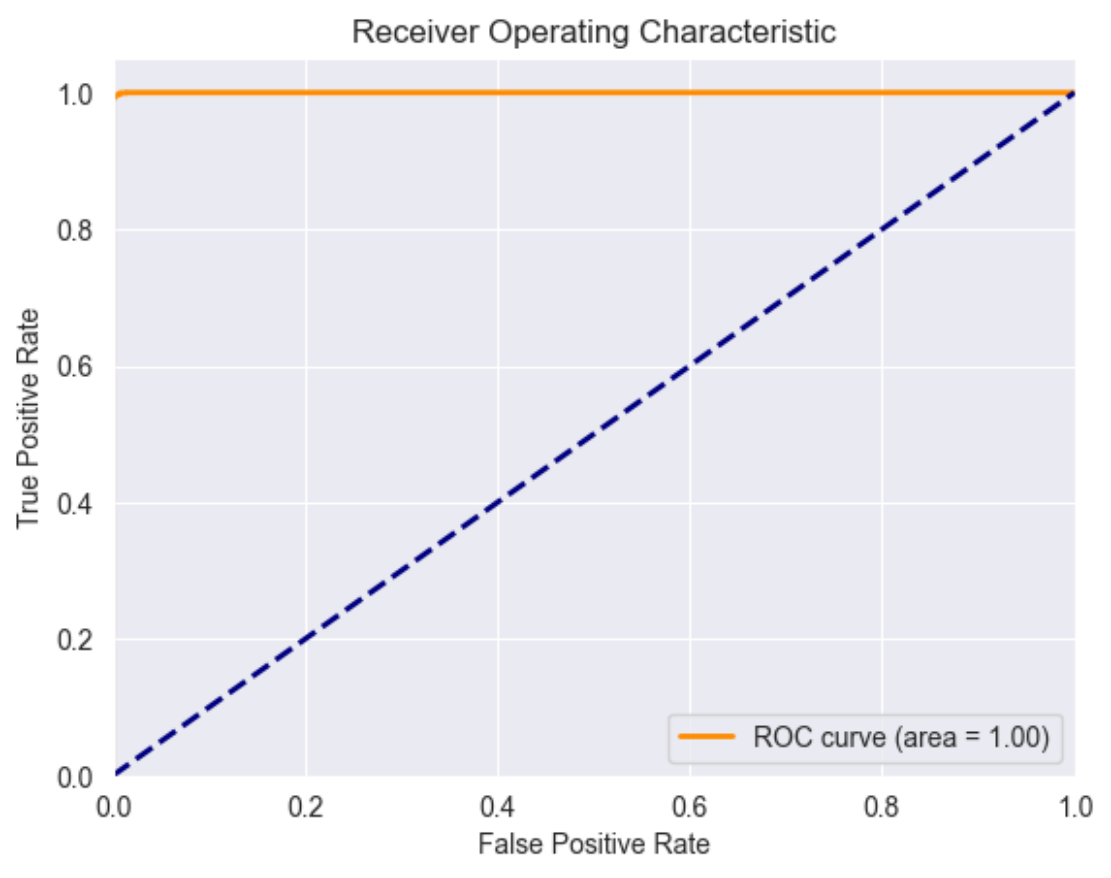
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THE BEST RESULT



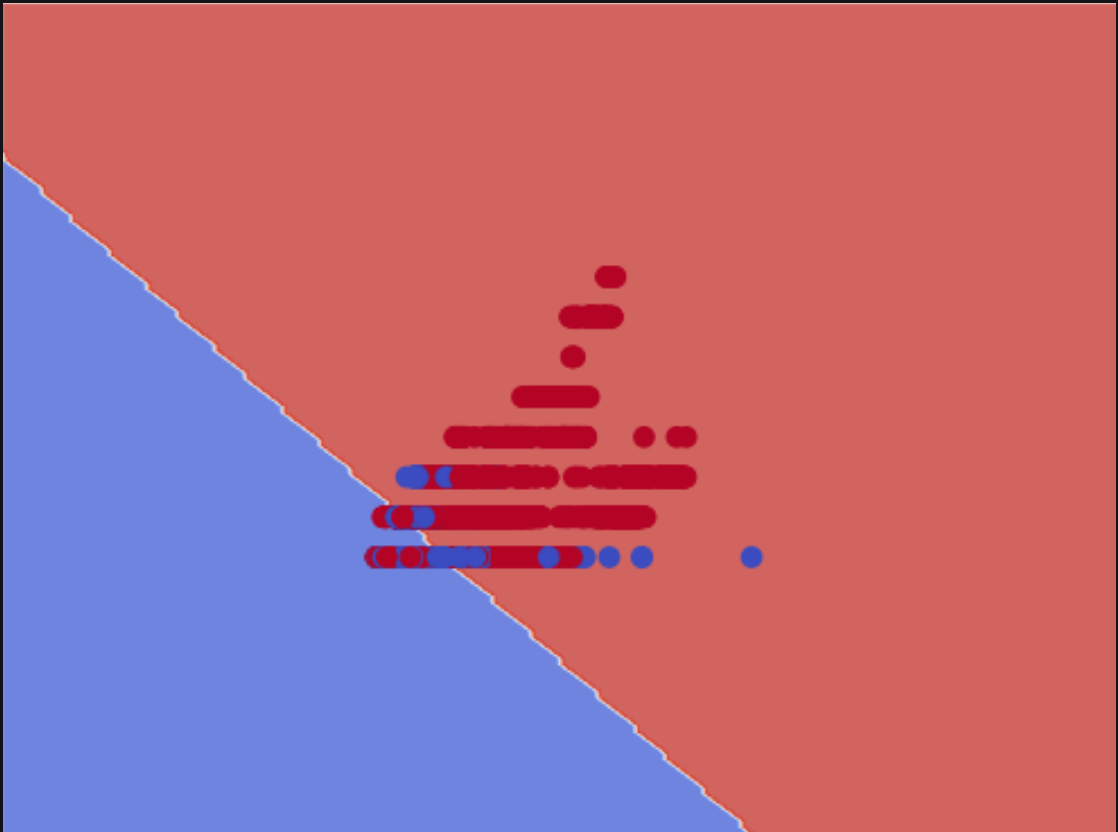
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Linear Support Vector Machines	
1812	1
27	1825

LINEAR SUPPORT VECTOR CLASSIFIER

Accuracy	0.9923
Precision	0.9924
Recall	0.9923
F1-score	0.9923



Linear Support Vector Machines	
1812	1
27	1825

LINEAR SUPPORT VECTOR CLASSIFIER

Accuracy	0.9923
Precision	0.9924
Recall	0.9923
F1-score	0.9923

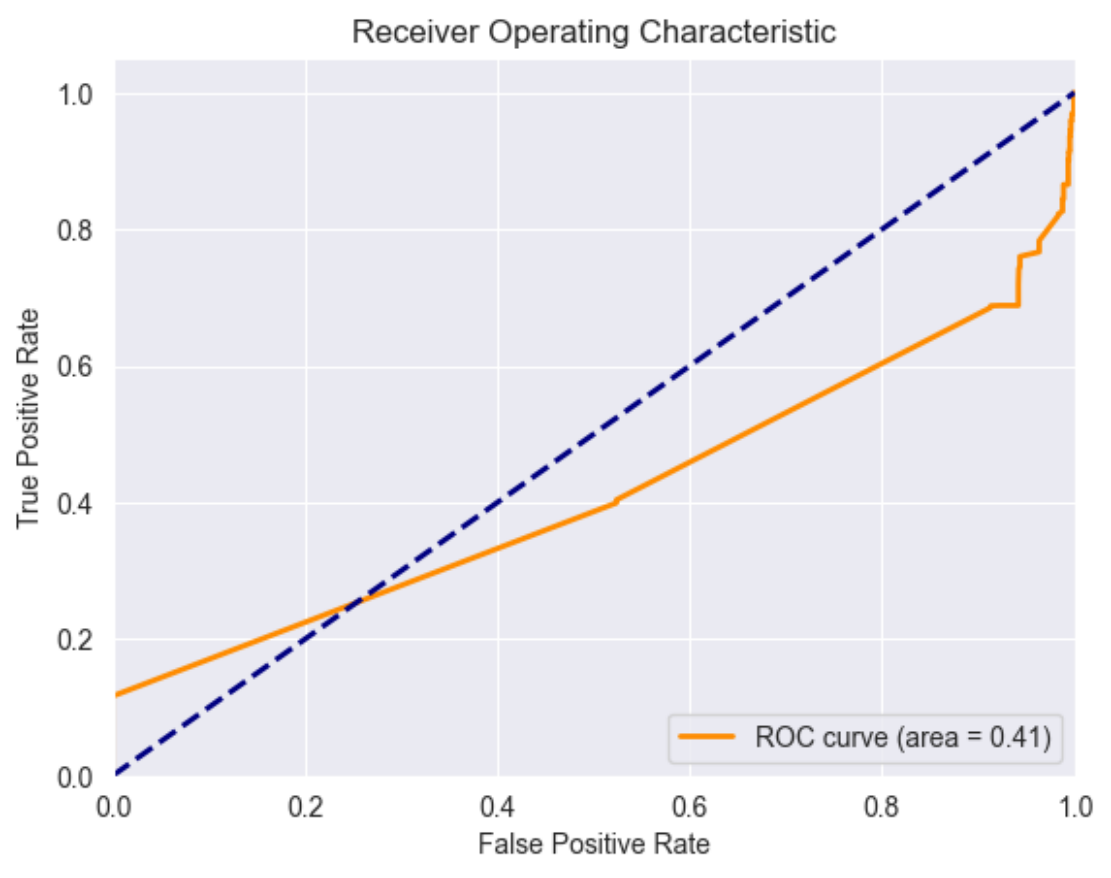
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FAILURES



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Linear Support Vector Machines	
135	1678
0	1852

RADIUS NEAREST CLASSIFIER

Accuracy	0.5421
Precision	0.7597
Recall	0.5421
F1-score	0.4163