

Isolation Forest (telemetry-only)

Test set rows: 4839

Anomaly fraction (test): 0.0093

	Precision	Recall	f1-score	support
0	1.00	0.98	0.99	4794
1	0.17	0.53	0.26	45
accuracy	0.97		4839	
macro avg	0.58	0.75	0.62	4839
weighted avg	0.99	0.97	0.98	4839

Risk Fusion (Logistic Regression)

	Precision	Recall	f1-score	support
0	1.00	0.99	1.00	4794
1	0.48	0.53	0.51	45
accuracy	0.99	4839		
macro avg	0.74	0.76	0.75	4839
weighted avg	0.99	0.99	0.99	4839

ROC-AUC: 0.8652

Fusion (multi-class) evaluation

	precision	recall	f1-score	support
Cyberattack_anomaly	0.97	0.92	0.94	399
normal	1.00	1.00	1.00	15729
accuracy	1.00			16128
macro avg	0.98	0.96	0.97	16128
weighted avg	1.00	1.00	1.00	16128

Cyberattack detector

PR-AUC: 0.9397535482038583

ROC-AUC: 0.9752772961713203

The dataset did not contain other anomalies. Trying again with a new dataset with more added anomalies.