

06_16 Comparative Study

IEEE34 Dataset with 9% Gaussian Noise

Model	Testing Accuracy	AUROC	F1 – Score
Chebyshev GNN	0.90295	0.99506	0.89737
kNN	0.88087	0.93106	0.86621
MLP	0.86536	0.99437	0.85614
Naive Bayes	0.15454	0.57845	0.19971

IEEE34 Dataset with 6% Gaussian Noise

Model	Testing Accuracy	AUROC	F1 – Score
Chebyshev GNN	0.91508	0.99735	0.90693
kNN	0.89989	0.93909	0.88246
MLP	0.87486	0.99501	0.86498
Naive Bayes	0.15453	0.57829	0.19972

IEEE34 Dataset with 3% Gaussian Noise

Model	Testing Accuracy	AUROC	F1 – Score
Chebyshev GNN	0.92503	0.99786	0.91753
kNN	0.91355	0.94422	0.89321
MLP	0.88044	0.99521	0.87311
Naive Bayes	0.15585	0.58028	0.20221

IEEE34 Dataset with No Gaussian Noise

Model	Testing Accuracy	AUROC	F1 – Score
Chebyshev GNN	0.92863	0.99807	0.91869
kNN	0.93574	0.95285	0.91041
MLP	0.88197	0.99535	0.87599
Naive Bayes	0.49355	0.94217	0.54266