Student Dropout Prediction Report

Executive Summary

This report analyzes 1000 students for dropout risk using machine learning.

Key Findings:
• 260 students (26.0%) are at HIGH risk of dropping out
• 4 students (0.4%) are at MEDIUM risk
• 736 students (73.6%) are at LOW risk
• Average dropout probability: 26.5%

Risk Distribution

Risk Level	Count	Percentage
High Risk	260	26.0%
Medium Risk	4	0.4%
Low Risk	736	73.6%
Total	1000	100.0%

Model Performance

Metric	Value
Accuracy	0.980
Precision	0.950
Recall	0.974
F1-Score	0.962
ROC-AUC	1.000

High-Risk Students

Student ID	Name	Probability	Attendance %	Performance %

STU_0008	Student 8	99.6%	51.5235159264094%	55.38185682166997%
STU_0013	Student 13	100.0%	44.42700418783465%	37.03964551237768%
STU_0014	Student 14	100.0%	45.948838061329%	18.042987840696743%
STU_0015	Student 15	100.0%	31.471470568666252%	49.63957353969639%
STU_0022	Student 22	100.0%	41.80157034102013%	7.310102801282893%
STU_0027	Student 27	100.0%	38.2786531937463%	25.065106012059008%
STU_0032	Student 32	99.9%	56.78631679474163%	46.36933889591708%
STU_0033	Student 33	99.6%	47.77900384705188%	41.85399144110041%
STU_0036	Student 36	99.9%	46.91905533874567%	35.9951980687556%
STU_0040	Student 40	100.0%	56.68167949837925%	36.54547404651795%
STU_0043	Student 43	100.0%	52.12789966176281%	35.81415570233392%
STU_0045	Student 45	99.4%	63.281828083649074%	29.73045606662433%
STU_0051	Student 51	99.2%	53.85520916178243%	42.364493577281785%
STU_0052	Student 52	99.4%	38.08359715384717%	59.76147699786686%
STU_0054	Student 54	100.0%	45.88437283743776%	10.699369589372653%
STU_0056	Student 56	99.7%	52.62961441852721%	44.53997903595697%
STU_0061	Student 61	99.9%	38.1657750311452%	54.5075720859649%
STU_0062	Student 62	99.9%	49.105150530154425%	43.31301154460305%
STU_0068	Student 68	99.4%	41.08219187016026%	60.6775613092277%
STU_0069	Student 69	100.0%	46.46804617295825%	4.904626350230446%