

8 Model Performance Comparison Table (Training Set vs Validation Set CV)

模型	特征数	标准化方法	训练集准确率(95%CI)	验证集准确率(95%CI)	训练集AUC(95%CI)	验证集AUC(95%CI)	训练集精确率	验证集精确率	训练集召回率	验证集召回率	训练集F1	验证集F1
LogisticRegression	10	StandardScaler	94.52(92.59, 96.45)	92.56(85.88, 99.24)	97.91(97.19, 98.62)	91.98(83.96, 100.00)	97.39%	96.88%	94.12%	91.18%	95.73%	93.94%
SGD	10	RobustScaler	92.61(89.56, 95.65)	92.86(83.83, 100.00)	96.84(96.03, 97.66)	90.83(78.66, 100.00)	94.14%	94.12%	94.54%	94.12%	94.34%	94.12%
SVM	10	StandardScaler	94.50(93.08, 95.92)	88.99(80.41, 97.56)	97.21(96.39, 98.04)	93.33(86.00, 100.00)	95.80%	91.18%	95.80%	91.18%	95.80%	91.18%
ExtraTrees	10	StandardScaler	93.14(92.00, 94.28)	88.99(80.41, 97.56)	98.91(98.57, 99.26)	93.33(84.74, 100.00)	92.77%	86.84%	97.06%	97.06%	94.87%	91.67%
NeuralNetwork	10	StandardScaler	96.44(95.51, 97.37)	88.99(76.54, 100.00)	98.12(97.36, 98.89)	93.23(84.92, 100.00)	97.47%	91.18%	97.06%	91.18%	97.26%	91.18%
KNN	10	StandardScaler	100.00(100.00, 100.00)	87.20(77.17, 97.24)	100.00(100.00, 100.00)	88.12(76.11, 100.00)	100.00%	86.49%	100.00%	94.12%	100.00%	90.14%
GradientBoosting	10	StandardScaler	98.63(97.27, 99.99)	84.82(74.96, 94.68)	99.92(99.83, 100.00)	79.48(66.98, 91.98)	98.74%	88.24%	99.16%	88.24%	98.95%	88.24%
RandomForest	10	StandardScaler	97.52(96.86, 98.19)	80.95(71.99, 89.92)	99.63(99.37, 99.89)	89.79(80.48, 99.11)	98.72%	83.33%	97.48%	88.24%	98.10%	85.71%