Real Estate Model Evaluation Report

Generated on: 2025-04-23 00:03:17

Model Performance Metrics

Linear Regression

MAE: 120717.8998
RMSE: 237612.4649
R² Score: 0.7957
Accuracy: 0.9125
Precision: 0.8808
Recall: 0.9527
F1 Score: 0.9153
ROC AUC: 0.9643

Random Forest

MAE: 8963.7169
RMSE: 70740.0759
R² Score: 0.9819
Accuracy: 0.9945
Precision: 0.9900
Recall: 0.9990
F1 Score: 0.9945
ROC AUC: 0.9999

SVM

MAE: 272001.2141
RMSE: 538152.0644
R² Score: -0.0478
Accuracy: 0.4965
Precision: 0.4965
Recall: 1.0000
F1 Score: 0.6635
ROC AUC: 0.9099

XGBoost

MAE: 21954.0993
RMSE: 177695.3123
R² Score: 0.8858
Accuracy: 0.9900
Precision: 0.9889
Recall: 0.9909
F1 Score: 0.9899
ROC AUC: 0.9995

Comparison Summary Table

Metric	Linear Regression	Random Forest	SVM	XGBoost
MAE	120717.8998	8963.7169	272001.2141	21954.0993
RMSE	237612.4649	70740.0759	538152.0644	177695.3123
R² Score	0.7957	0.9819	-0.0478	0.8858
Accuracy	0.9125	0.9945	0.4965	0.9900