Backtesting Report for AAPL (2013)

Backtest Date: 2025-05-13

Error Metrics

Black-Scholes - MAE: 0.13, RMSE: 0.20

Binomial Tree - MAE: 0.13, RMSE: 0.20

Monte Carlo - MAE: 0.16, RMSE: 0.24

Machine Learning Error Metrics

Random Forest - MAE: 8.87, RMSE: 14.25

XGBoost - MAE: 0.45, RMSE: 0.88

Linear Regression - MAE: 146.99, RMSE: 186.68

SVR - MAE: 92.39, RMSE: 119.17

Backtesting Option Mid Price vs. Model Prices for AAPL (2013)

Backtesting Price Across Dates for AAPL (2013)