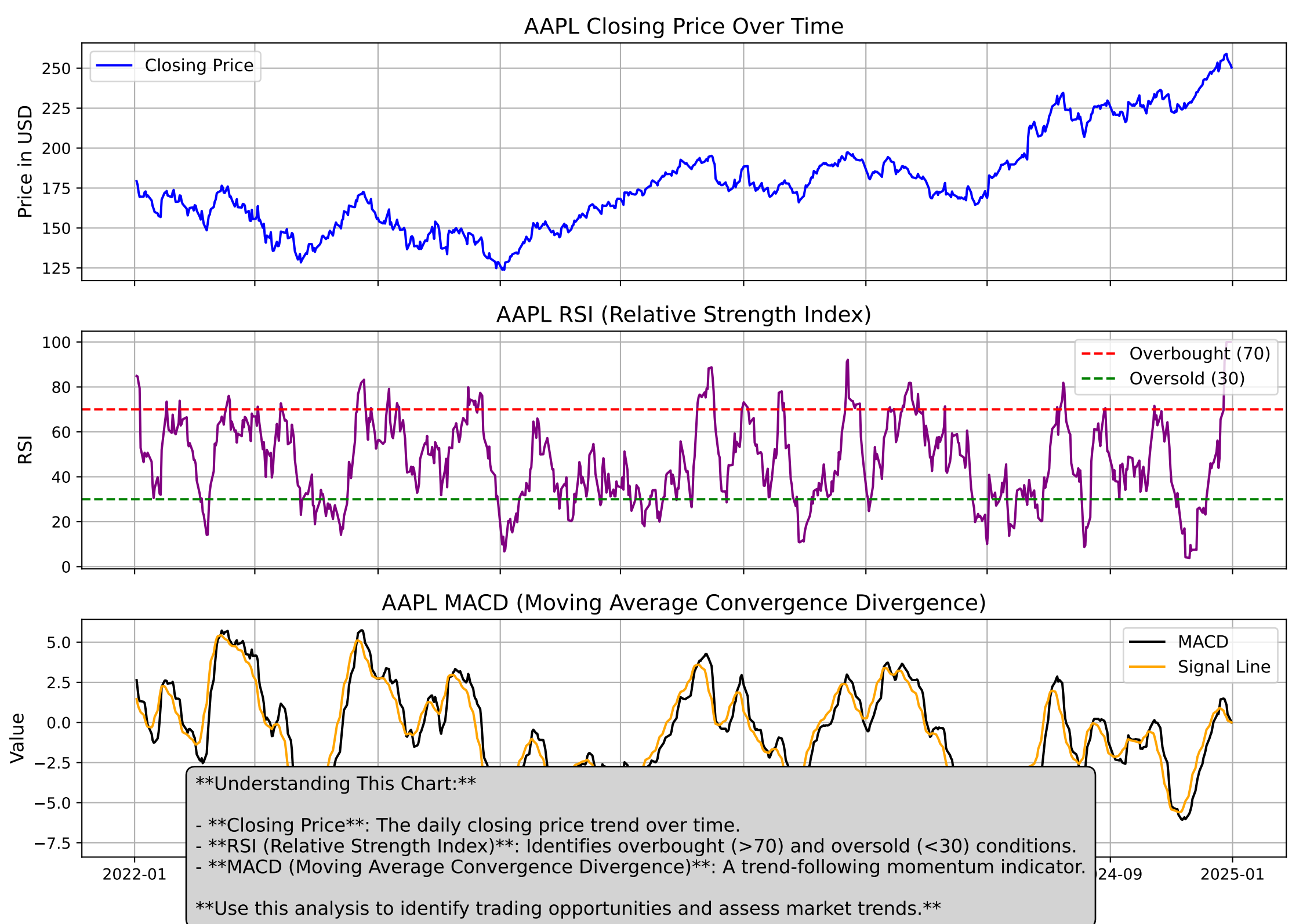
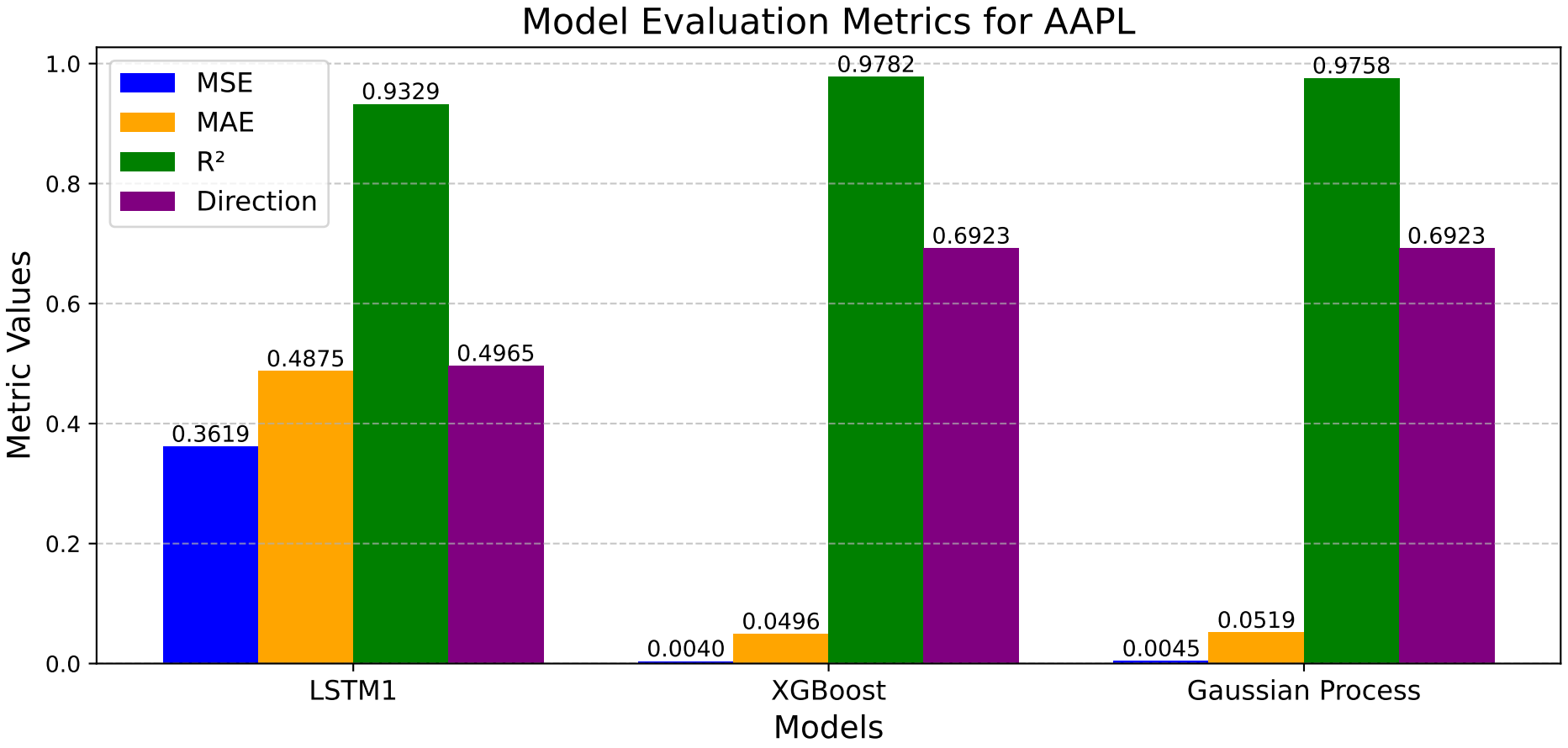
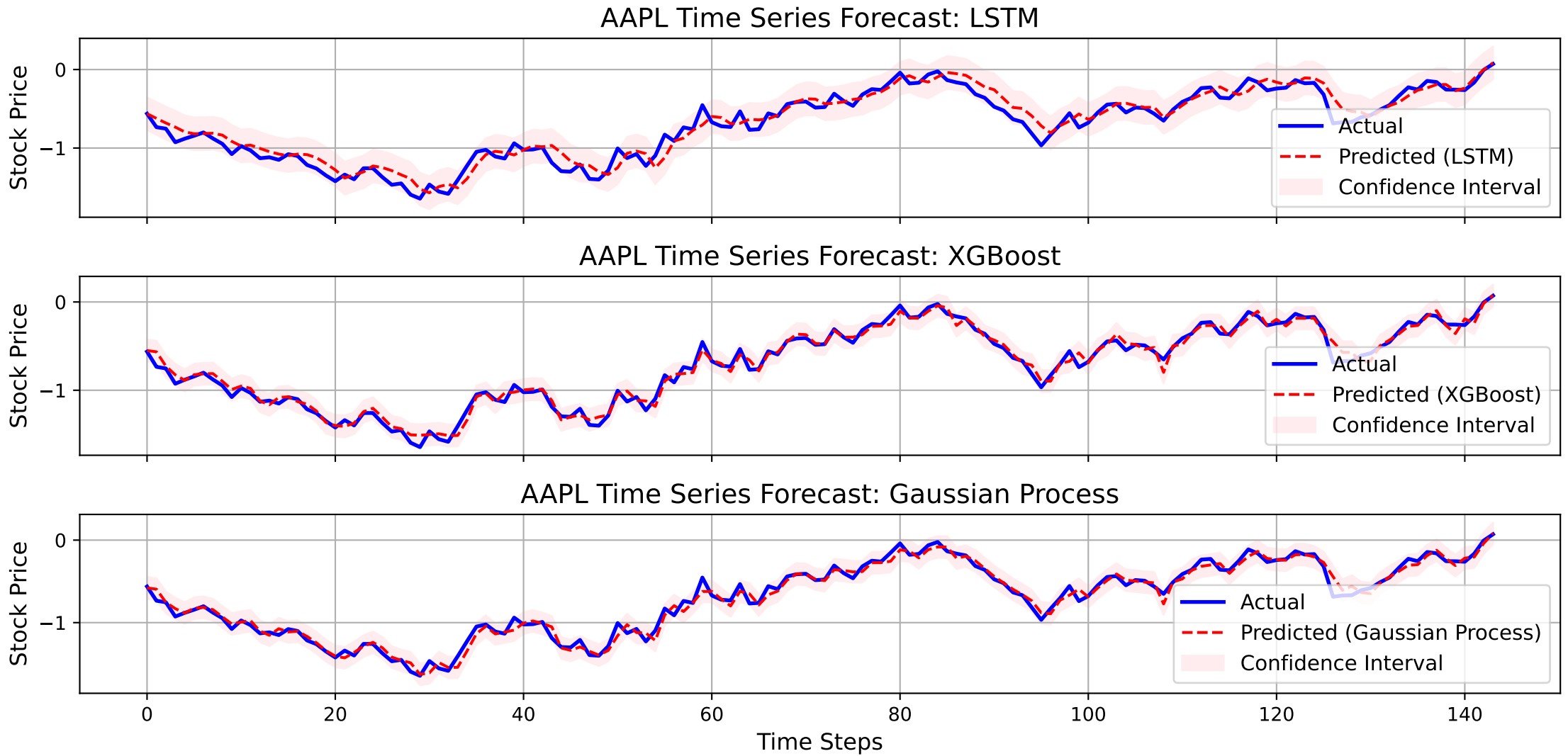

AAPL Closing Price Over Time
Closing Price
Price in USD
250
225
200
175
150
125
AAPL RSI (Relative Strength Index)
Overbought (70)
Oversold (30)
RSI
100
80
60
40
20
0
AAPL MACD (Moving Average Convergence Divergence)
MACD
Signal Line
Value
5.0
2.5
0.0
−2.5
−5.0
−7.5
2022-01
24-09
2025-01
Understanding This Chart:
- **Closing Price**: The daily closing price trend over time.
- **RSI (Relative Strength Index)**: Identifies overbought (>70) and oversold (<30) conditions.
- **MACD (Moving Average Convergence Divergence)**: A trend-following momentum indicator.
Use this analysis to identify trading opportunities and assess market trends.

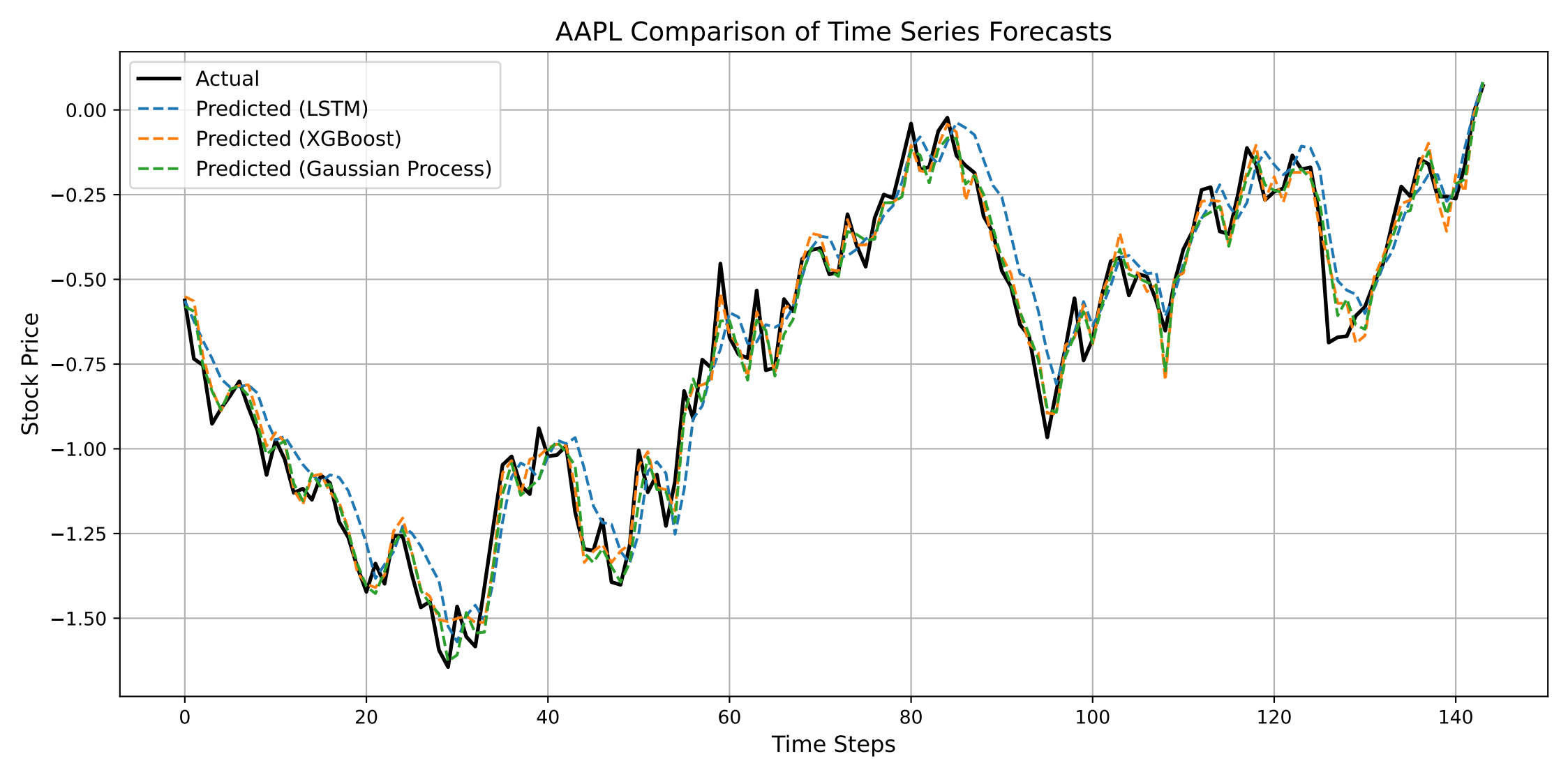


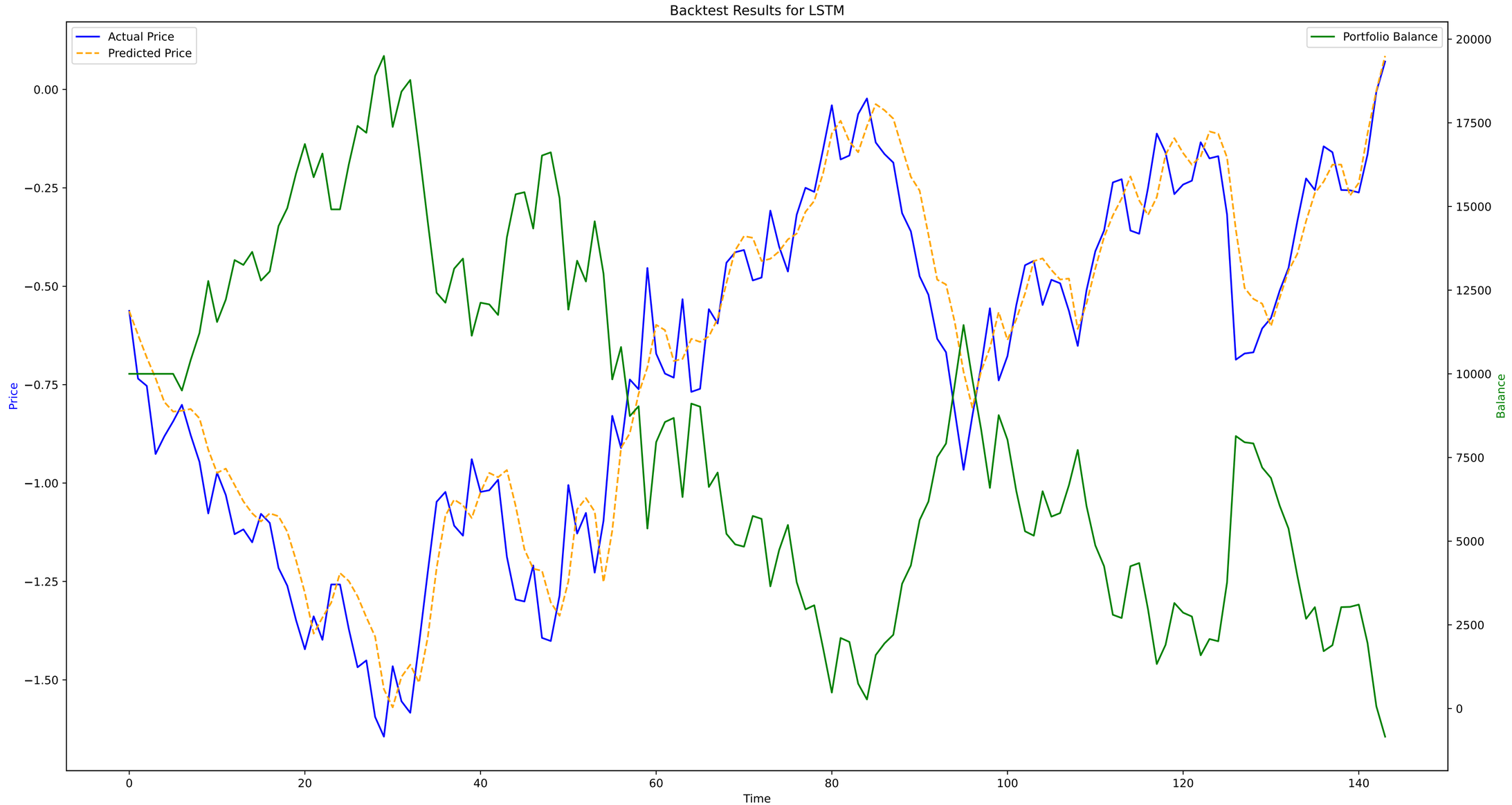
Understanding This Chart:

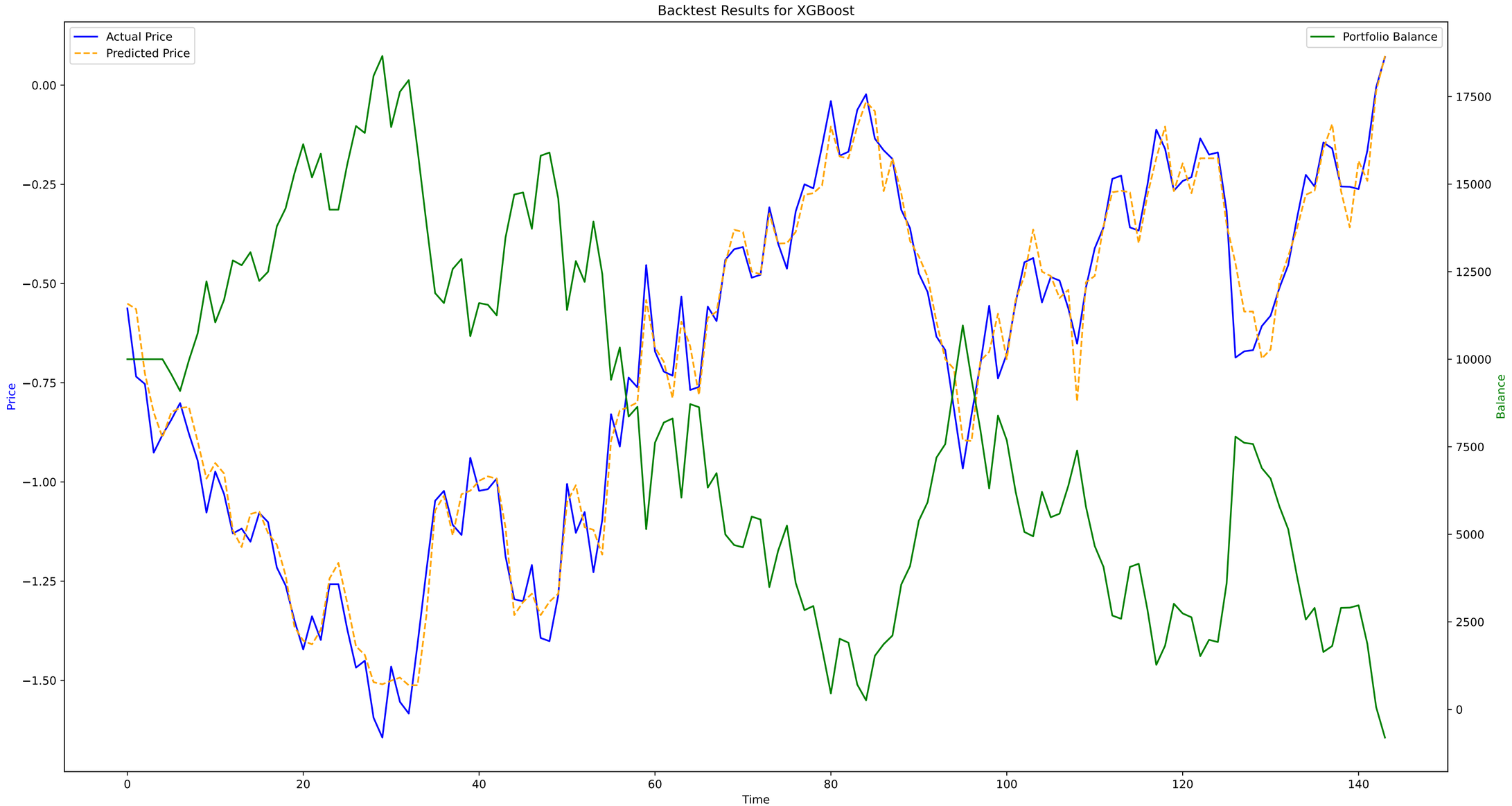
- **MSE (Mean Squared Error):** Measures how far predictions deviate from actual values. **Lower is better**.
- **MAE (Mean Absolute Error):** Similar to MSE but takes absolute differences. **Lower is better**.
- **R² Score:** Represents how well predictions fit the actual data. **Closer to 1 is better**.
- **Directional Accuracy:** Measures how often the model predicts the correct trend direction. **Higher is better**.

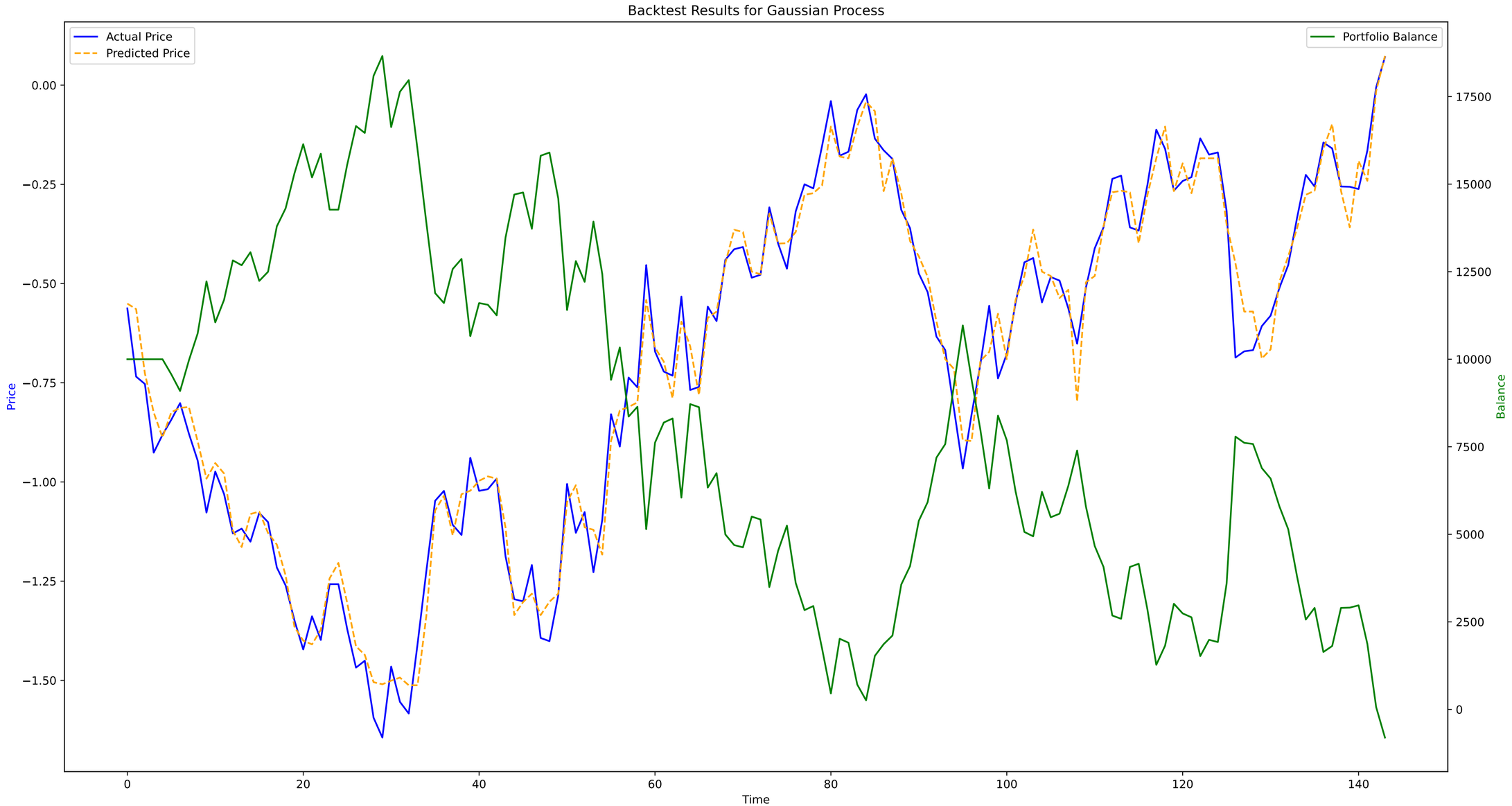
Use this chart to compare models and identify the most accurate predictor for stock prices.

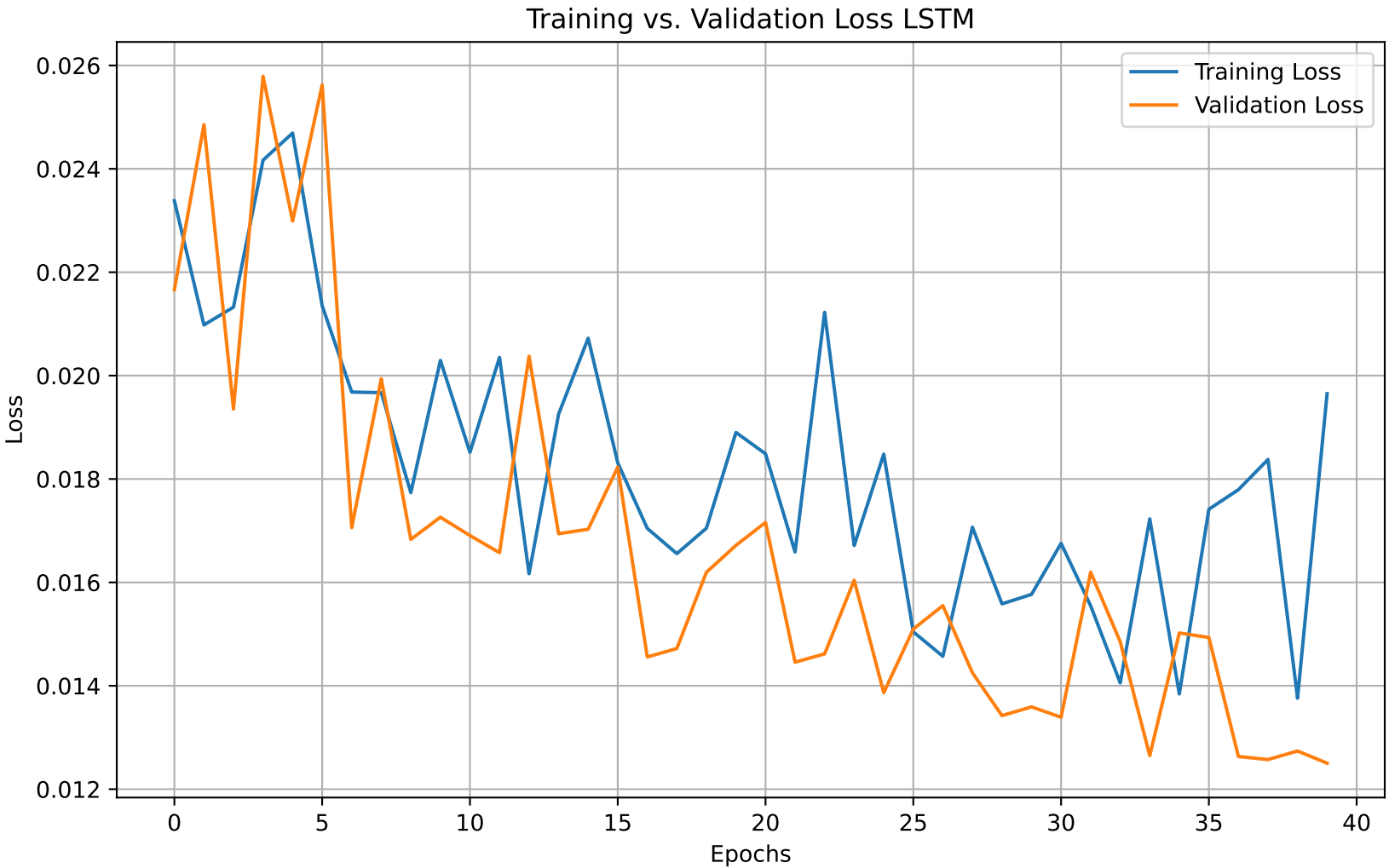

AAPL Time Series Forecast: LSTM
Stock Price
0
−1
Actual
Predicted (LSTM)
Confidence Interval
AAPL Time Series Forecast: XGBoost
Stock Price
0
−1
Actual
Predicted (XGBoost)
Confidence Interval
AAPL Time Series Forecast: Gaussian Process
Stock Price
0
−1
Actual
Predicted (Gaussian Process)
Confidence Interval
0
20
40
60
80
100
120
140
Time Steps

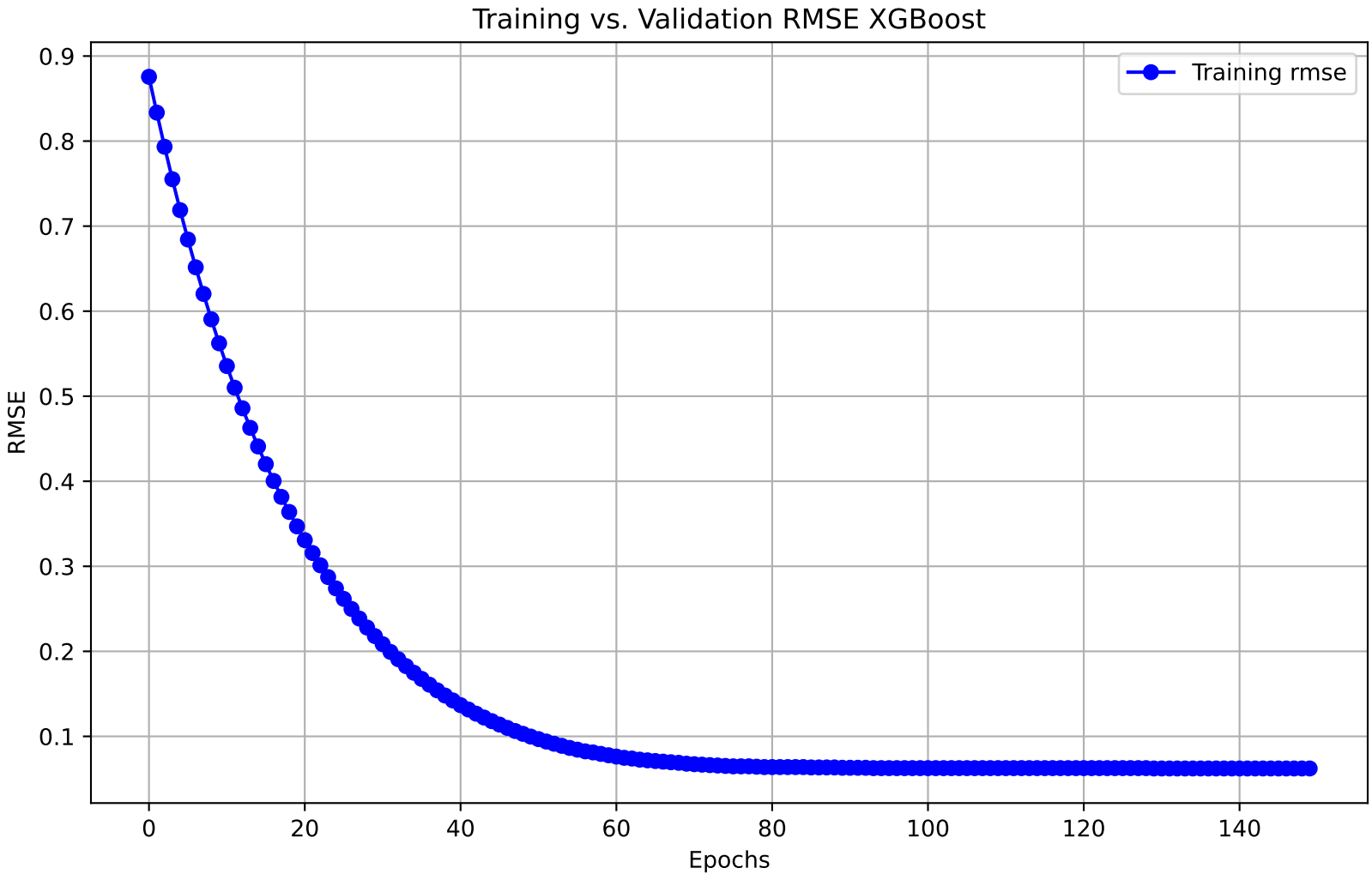

AAPL Comparison of Time Series Forecasts
Actual
Predicted (LSTM)
Predicted (XGBoost)
Predicted (Gaussian Process)
Stock Price
Time Steps
0.00
−0.25
−0.50
−0.75
−1.00
−1.25
−1.50
0
20
40
60
80
100
120
140

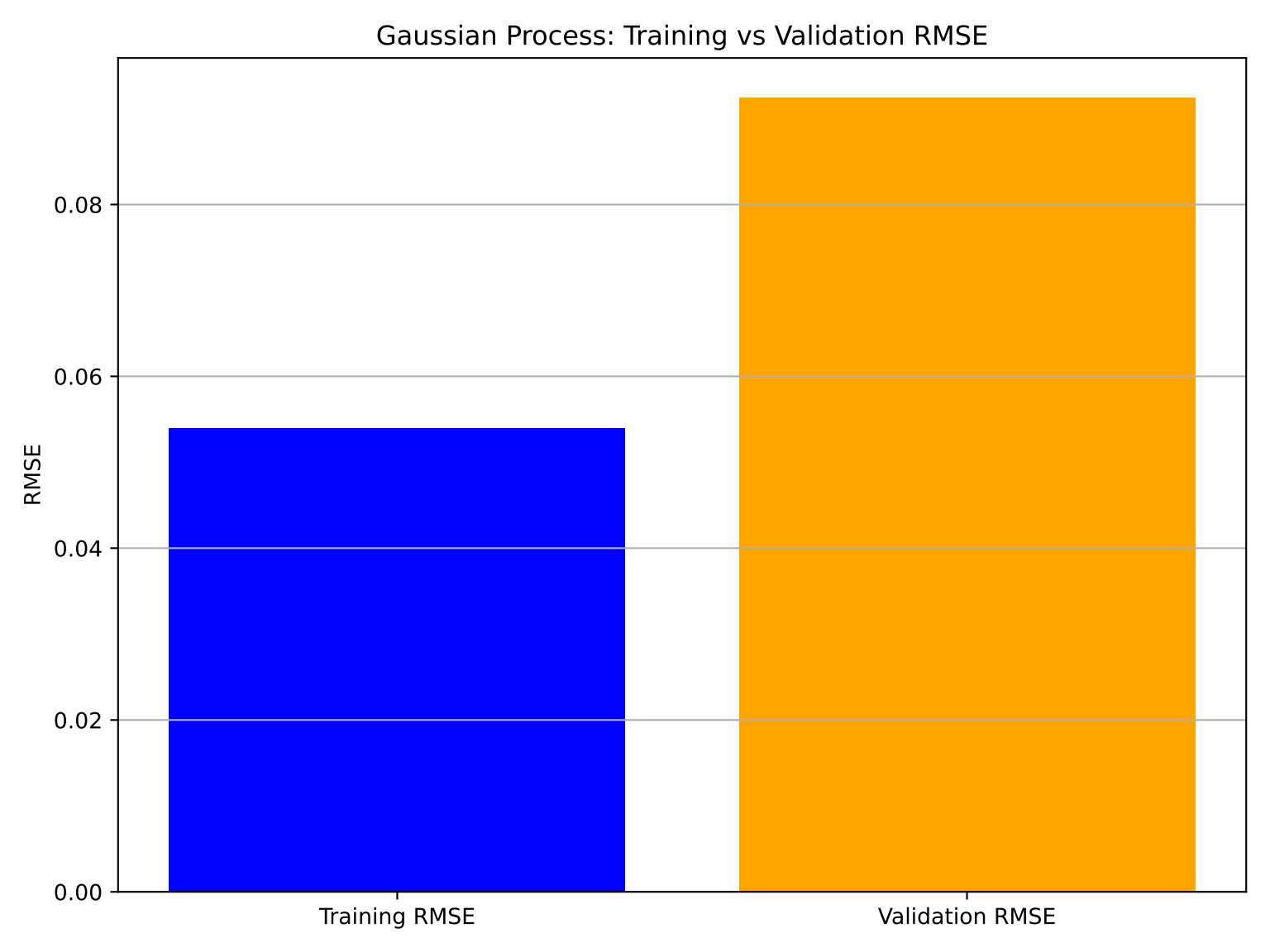

Backtest Results for LSTM
Actual Price
Predicted Price
Portfolio Balance
Price
Balance
Time
0.00
−0.25
−0.50
−0.75
−1.00
−1.25
−1.50
20000
17500
15000
12500
10000
7500
5000
2500
0
0
20
40
60
80
100
120
140


Backtest Results for XGBoost
Actual Price
Predicted Price
Portfolio Balance
Price
Balance
Time
0.00
−0.25
−0.50
−0.75
−1.00
−1.25
−1.50
17500
15000
12500
10000
7500
5000
2500
0
0
20
40
60
80
100
120
140


Backtest Results for Gaussian Process
Actual Price
Predicted Price
Portfolio Balance
Price
Balance
Time
0.00
−0.25
−0.50
−0.75
−1.00
−1.25
−1.50
17500
15000
12500
10000
7500
5000
2500
0
0
20
40
60
80
100
120
140


Training vs. Validation Loss LSTM
Training Loss
Validation Loss
Loss
Epochs
0.026
0.024
0.022
0.020
0.018
0.016
0.014
0.012
0
5
10
15
20
25
30
35
40


Training vs. Validation RMSE XGBoost
Training rmse
RMSE
Epochs
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
20
40
60
80
100
120
140


Gaussian Process: Training vs Validation RMSE
RMSE
0.00
0.02
0.04
0.06
0.08
Training RMSE
Validation RMSE