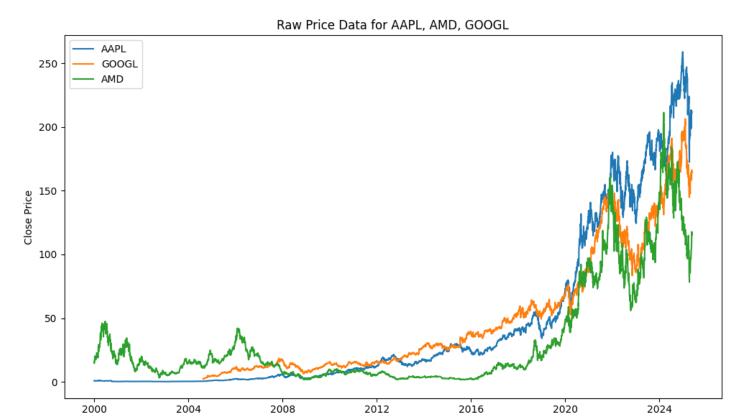
Stock Analysis Report

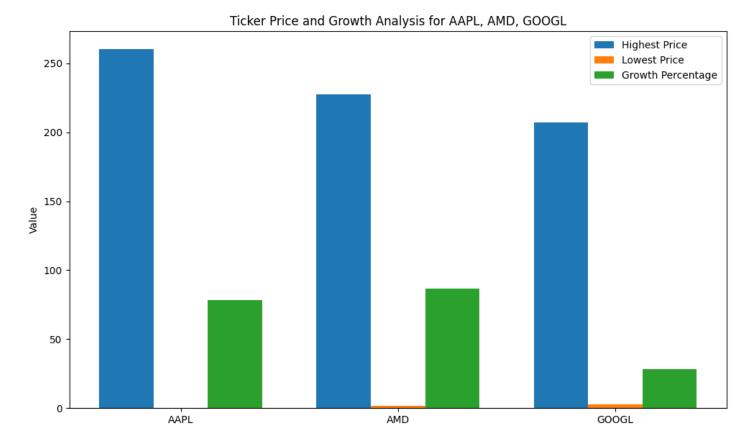
Generated on: 2025-05-19 15:08:38

Raw Price Data



Date

Ticker Price and Growth Analysis



Detailed Analysis Results

Ticker: AAPL

highest_price: 260.1000061035

lowest_price: 0.1927982346

growth_2020_percent: 78.23992904

sector: technology

Ticker: AMD

highest_price: 227.3000030518

lowest_price: 1.6100000143

growth_2020_percent: 86.7820813331

sector: technology

Ticker: GOOGL

highest_price: 207.0500030518

lowest_price: 2.8415920734

growth_2020_percent: 28.0533159059

sector: technology

LLM Recommendations

Ticker: AAPL

Recommendation: Hold

Reasoning: The LSTM model predicts a price close to the actual price, suggesting stability. While the MLP model forecasts a higher price, its higher RMSE indicates less reliability. Given the cautious long-term growth investment strategy, holding AAPL seems prudent.

Forecasts:

- LSTM: {'target_date': '2025-01-02', 'actual_price': 243.8500061035156, 'predicted_price': 242.17041927917796, 'performance': {'mse': 2.8210119004885756, 'rmse': 1.6795868243376333}}
- MLP: {'target_date': '2025-01-02', 'actual_price': 243.8500061035156, 'predicted_price': 254.0710219702207, 'performance': {'mse': 104.46916534743744, 'rmse': 10.221015866705102}}

Ticker: AMD

Recommendation: Hold

Reasoning: Both LSTM and MLP models predict prices relatively close to the actual price. The very low RMSE for LSTM indicates a high level of accuracy. Holding AMD aligns with a cautious growth strategy, as the models suggest stable performance.

Forecasts:

- LSTM: {'target_date': '2025-01-02', 'actual_price': 120.62999725341795, 'predicted_price': 120.56444755944497, 'performance': {'mse': 0.004296762379951716, 'rmse': 0.06554969397298294}}
- MLP: {'target_date': '2025-01-02', 'actual_price': 120.62999725341795, 'predicted_price': 122.7161961724524, 'performance': {'mse': 4.352225929780485, 'rmse': 2.0861989190344445}}

Ticker: GOOGL

Recommendation: Hold

Reasoning: The LSTM model's prediction is very close to the actual price, with a low RMSE. The MLP model's prediction is further off, with a higher RMSE. For a cautious investor, the LSTM suggests stability, making 'Hold' the appropriate recommendation.

Forecasts:

- LSTM: {'target_date': '2025-01-02', 'actual_price': 189.42999267578125, 'predicted_price': 189.15632716414913, 'performance': {'mse': 0.07489281225686857, 'rmse': 0.2736655116321174}}
- MLP: {'target_date': '2025-01-02', 'actual_price': 189.42999267578125, 'predicted_price':

183.57028315038139, 'performance': {'mse': 34.33619572206191, 'rmse': 5.859709525399865}}