Cryptocurrency Time Series Analysis Dashboard

This dashboard analyzes historical Ethereum prices using Random Forest Regression and ARIMA models.

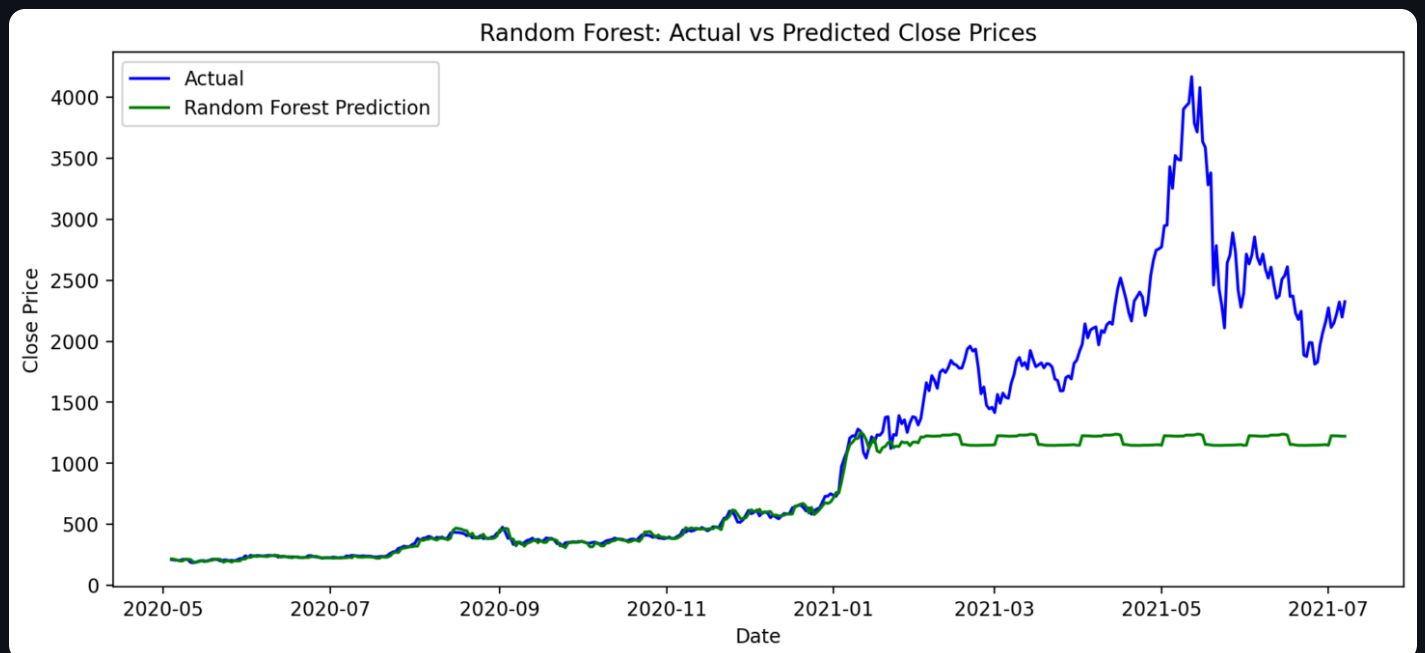## Model Performance

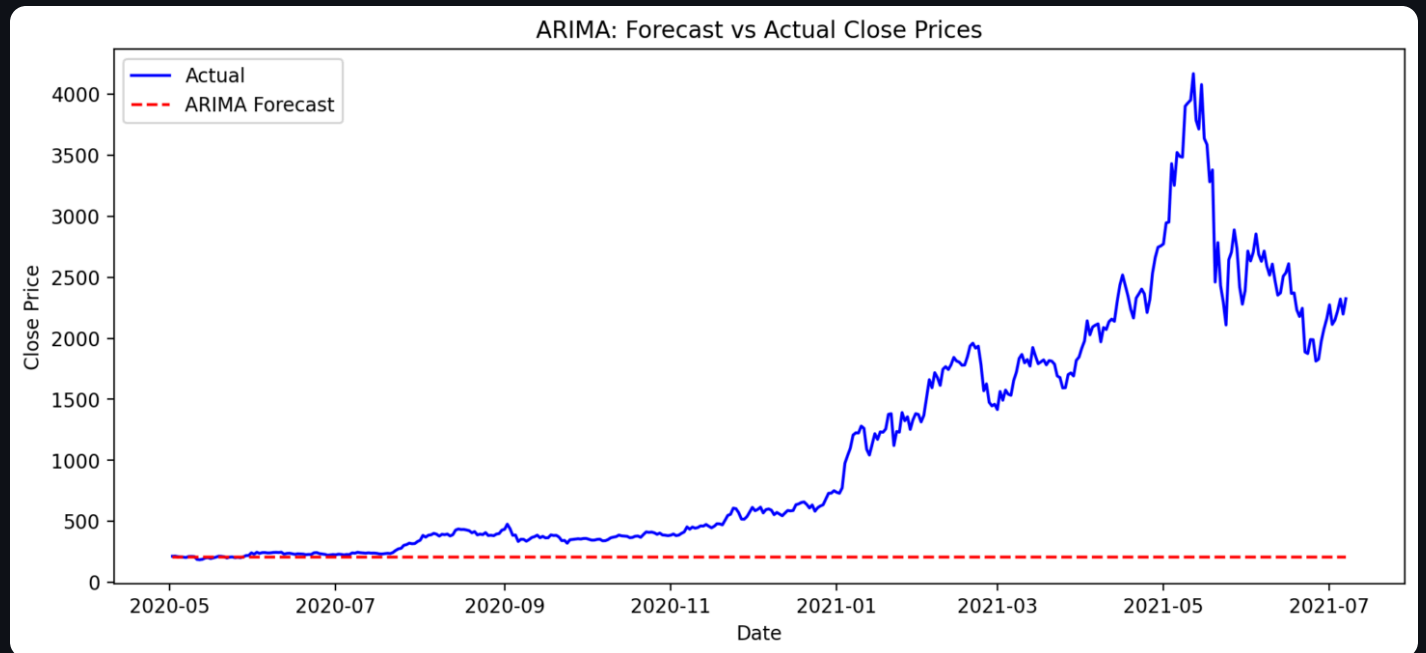**Random Forest Regression:**

- MAE: 401.12

- RMSE: 736.30

ARIMA Model:

- MAE: 901.92

- RMSE: 1319.25

Predicted vs Actual Close Prices

Random Forest captures patterns well, but might miss sudden sharp movements due to its ensemble averaging.
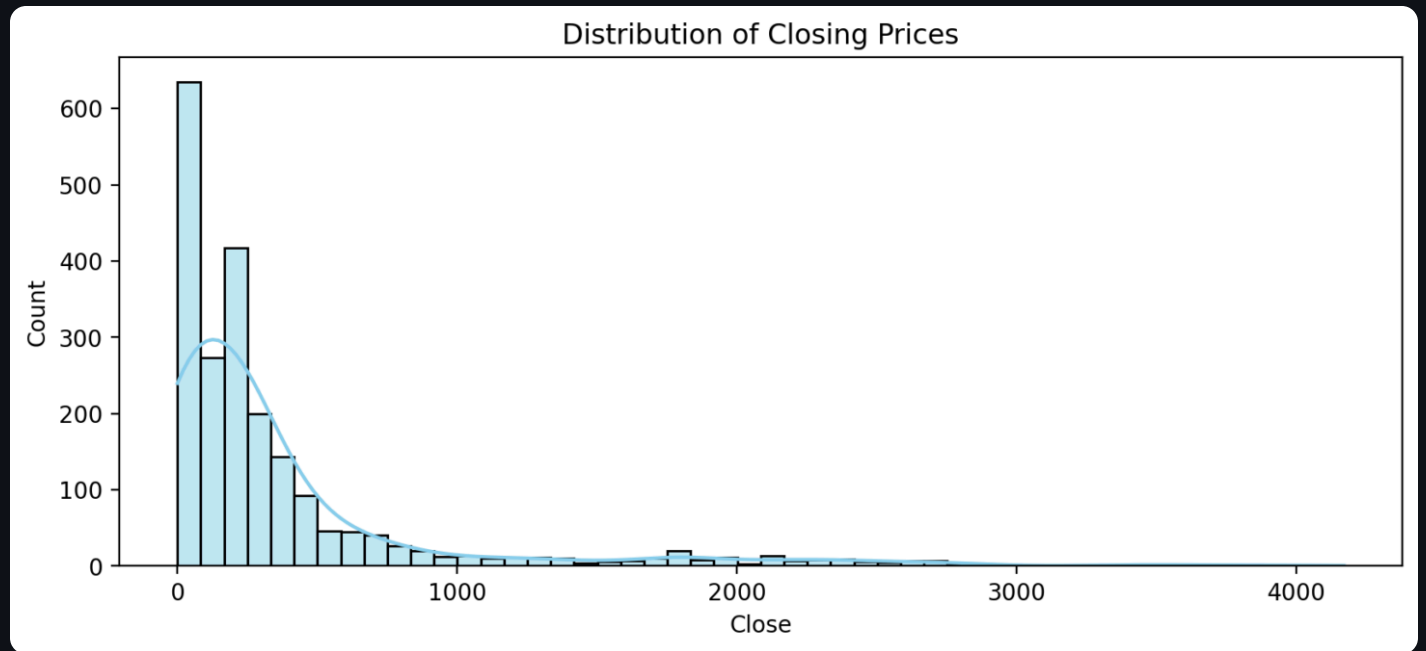

ARIMA model works well for linear and short-term predictions, capturing the trend based on past prices.

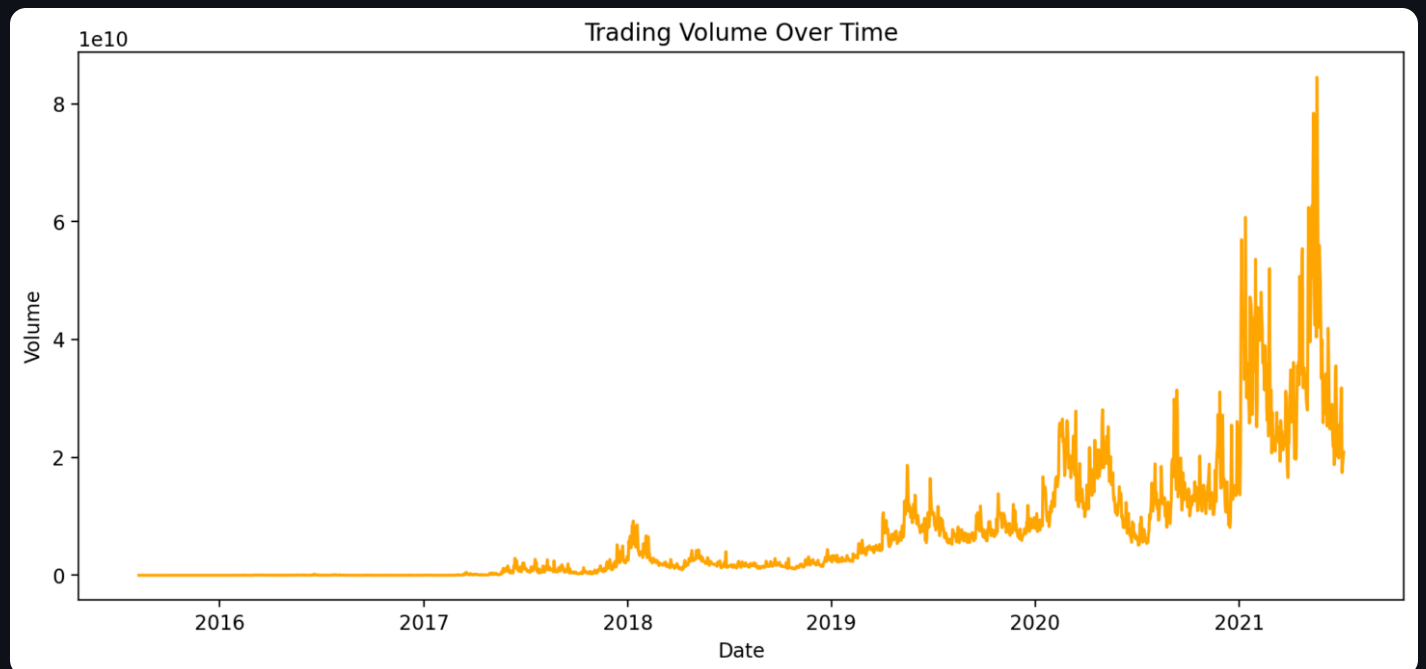# Historical Ethereum Price Chart

The historical closing price chart gives an overview of Ethereum's market trend over time.
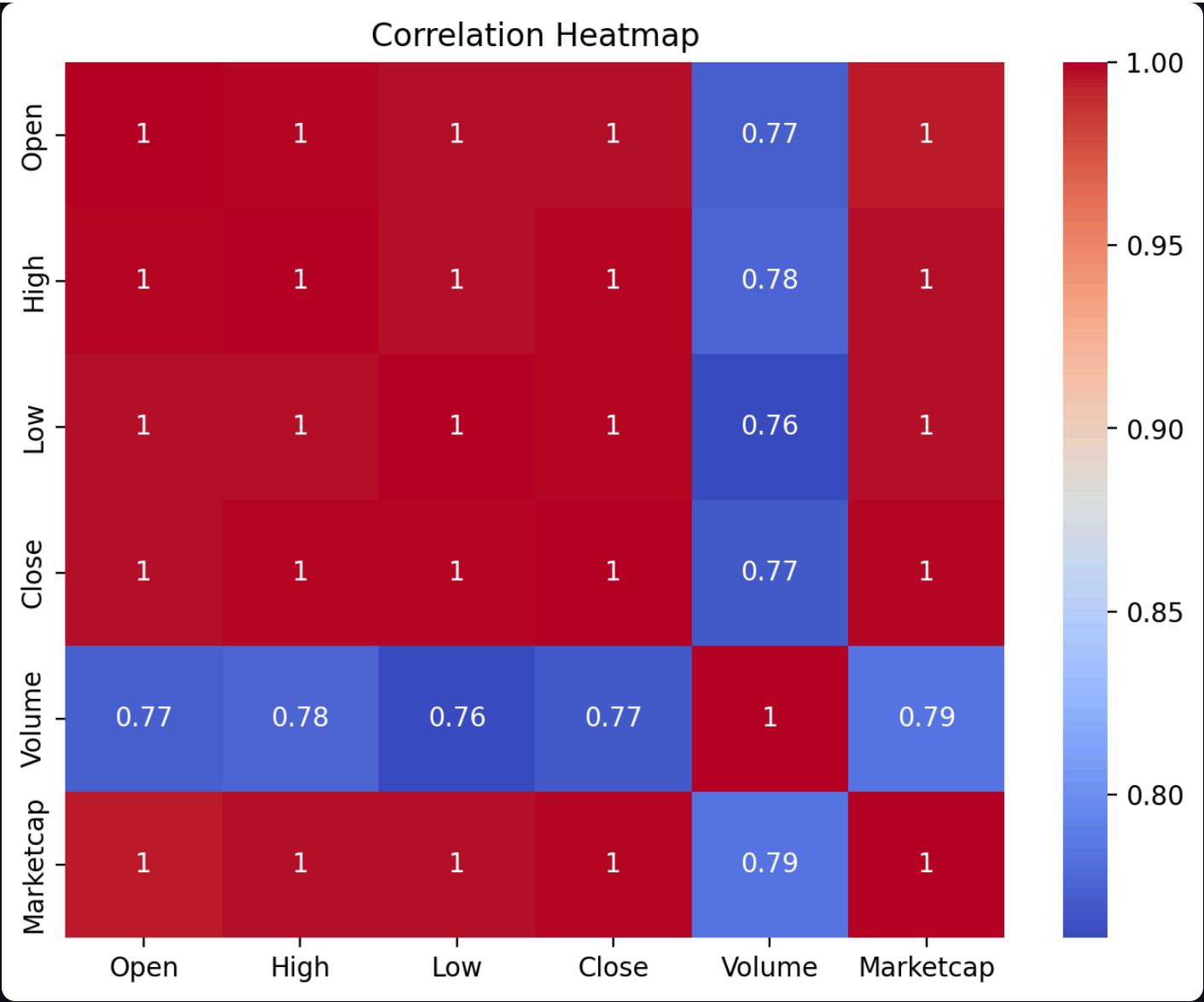
Price Distribution and Trends

This histogram shows the most common closing price ranges. The KDE curve helps visualize the probability density.

Volume trends often precede price movements. Peaks in volume can signal upcoming volatility.

Correlation Heatmap

The heatmap shows relationships between variables. Close price has a strong positive correlation with High and Low prices.