
Gold Price Prediction Using Machine Learning

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INTRODUCTION

→ GOLD IS A GLOBALLY TRUSTED INVESTMENT ASSET

- Gold prices fluctuate due to inflation, USD index, stock market, and crude oil prices.
- Predicting gold prices helps investors reduce financial risk.
- Machine Learning helps analyze complex historical patterns.





PROBLEM STATEMENT

→ ·FINANCIAL MARKETS ARE HIGHLY VOLATILE.

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- Need an intelligent regression model to forecast gold prices accurately.
 - Goal: Improve prediction accuracy using ML algorithms.
 - Manual prediction is inaccurate and risky.

DATASET OVERVIEW

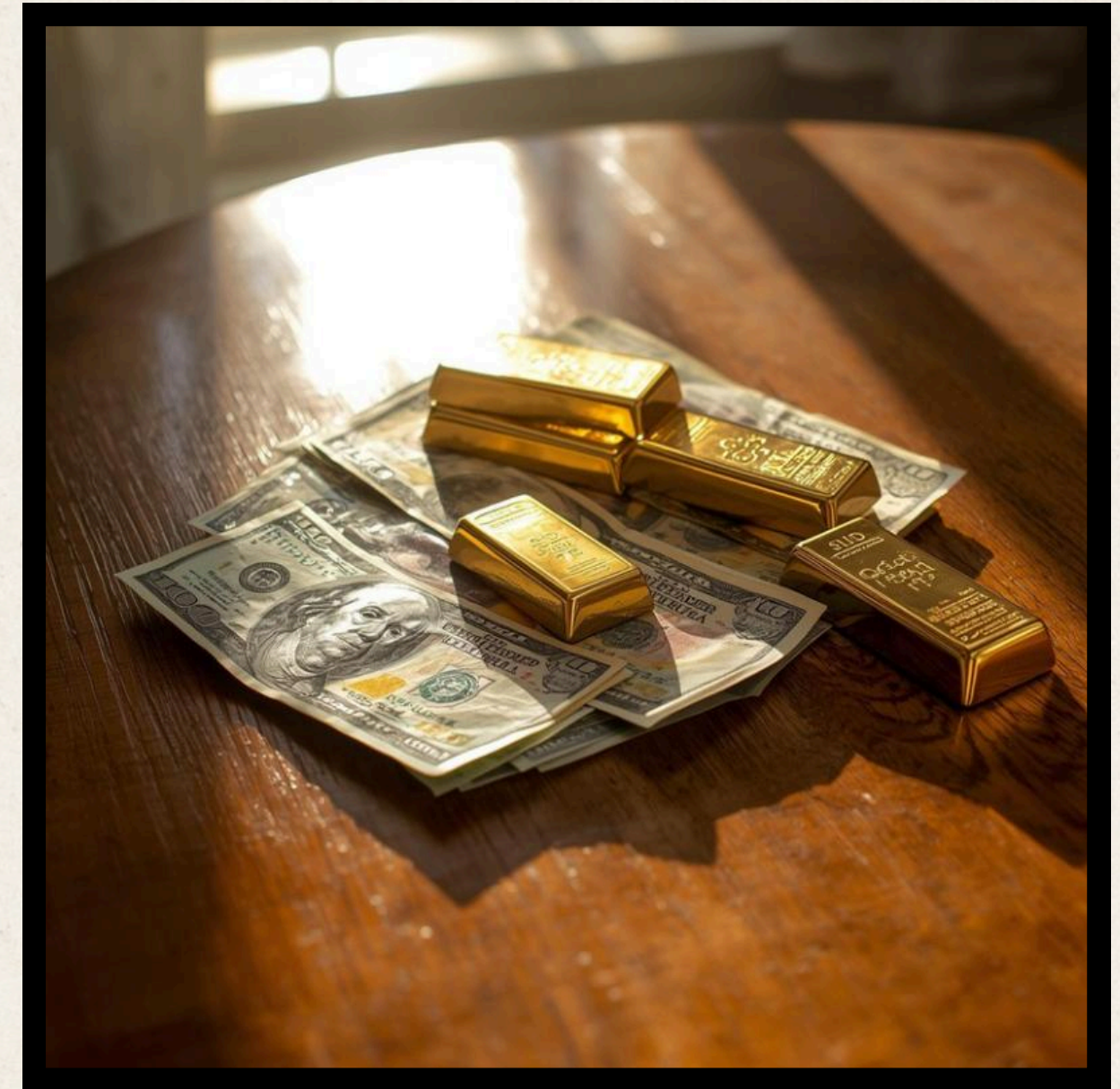
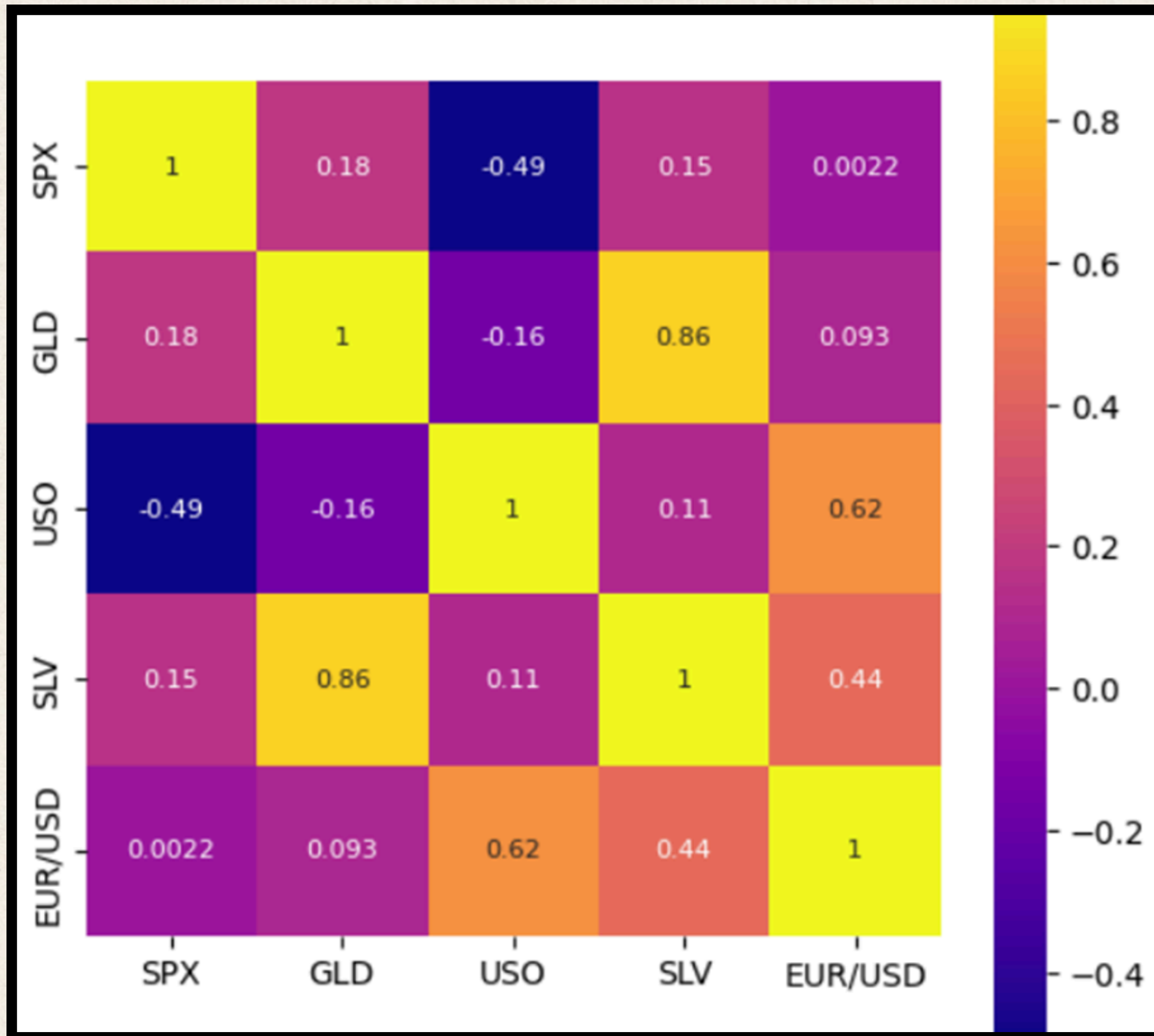


•Dataset includes SPX, GOLD, USO, SLV, EUR/USD features.

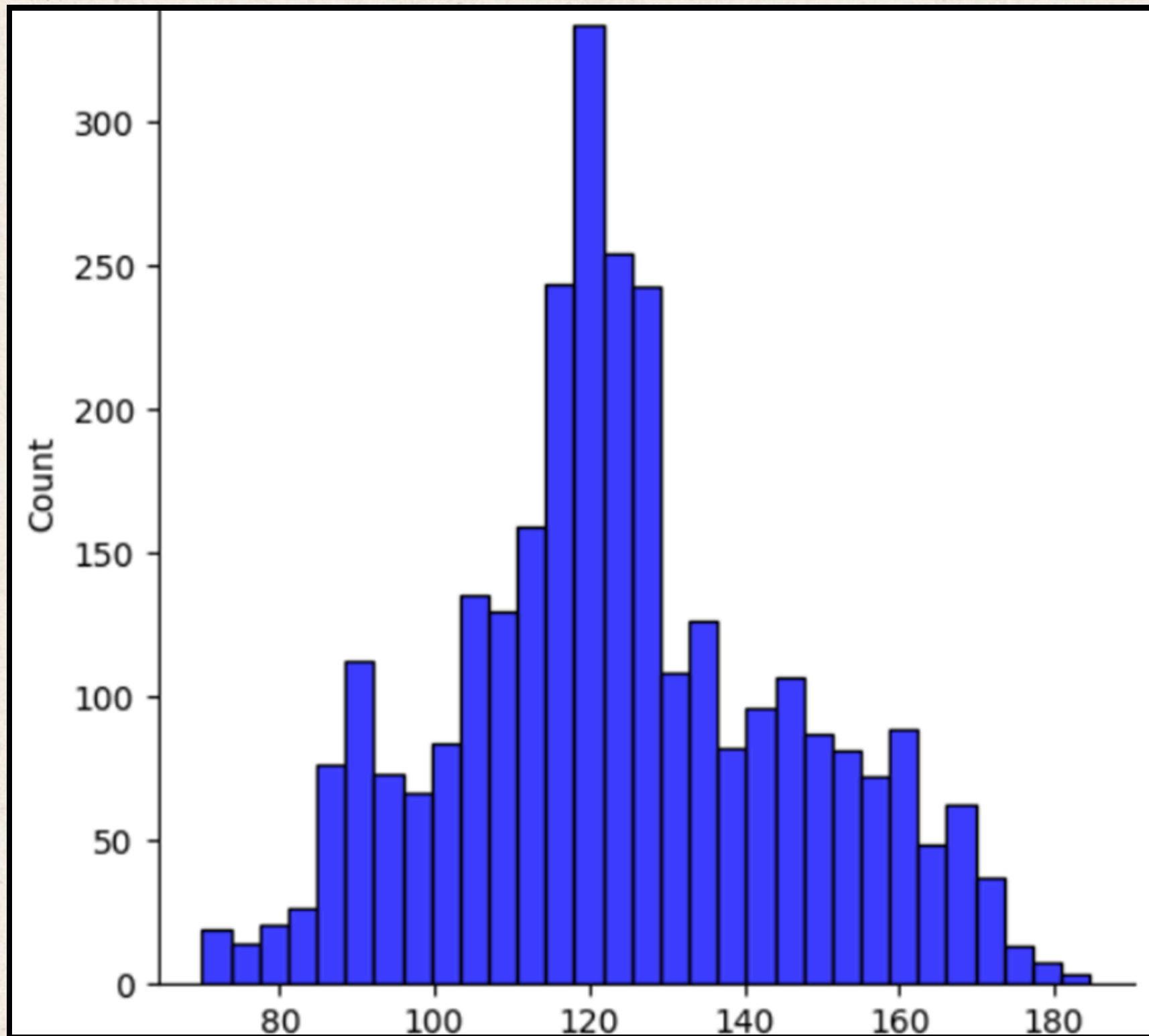
- GOLD represents gold price.
- Multiple economic indicators influence gold trends.
- Data cleaned and split into training and testing sets.



→ EARLY ADVANTAGE



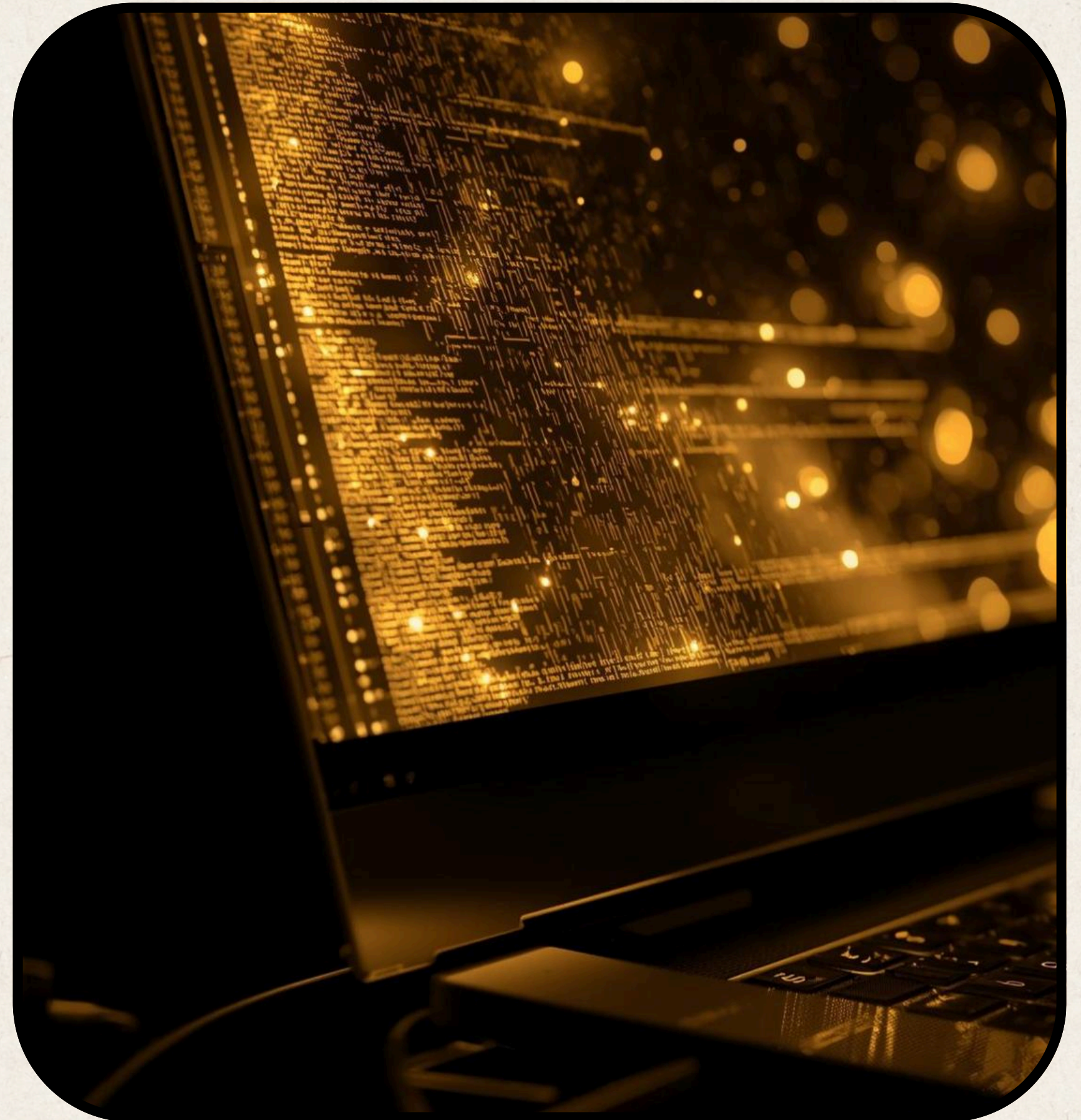
➔ DISTRIBUTION OF GOLD PRICES (GLD)



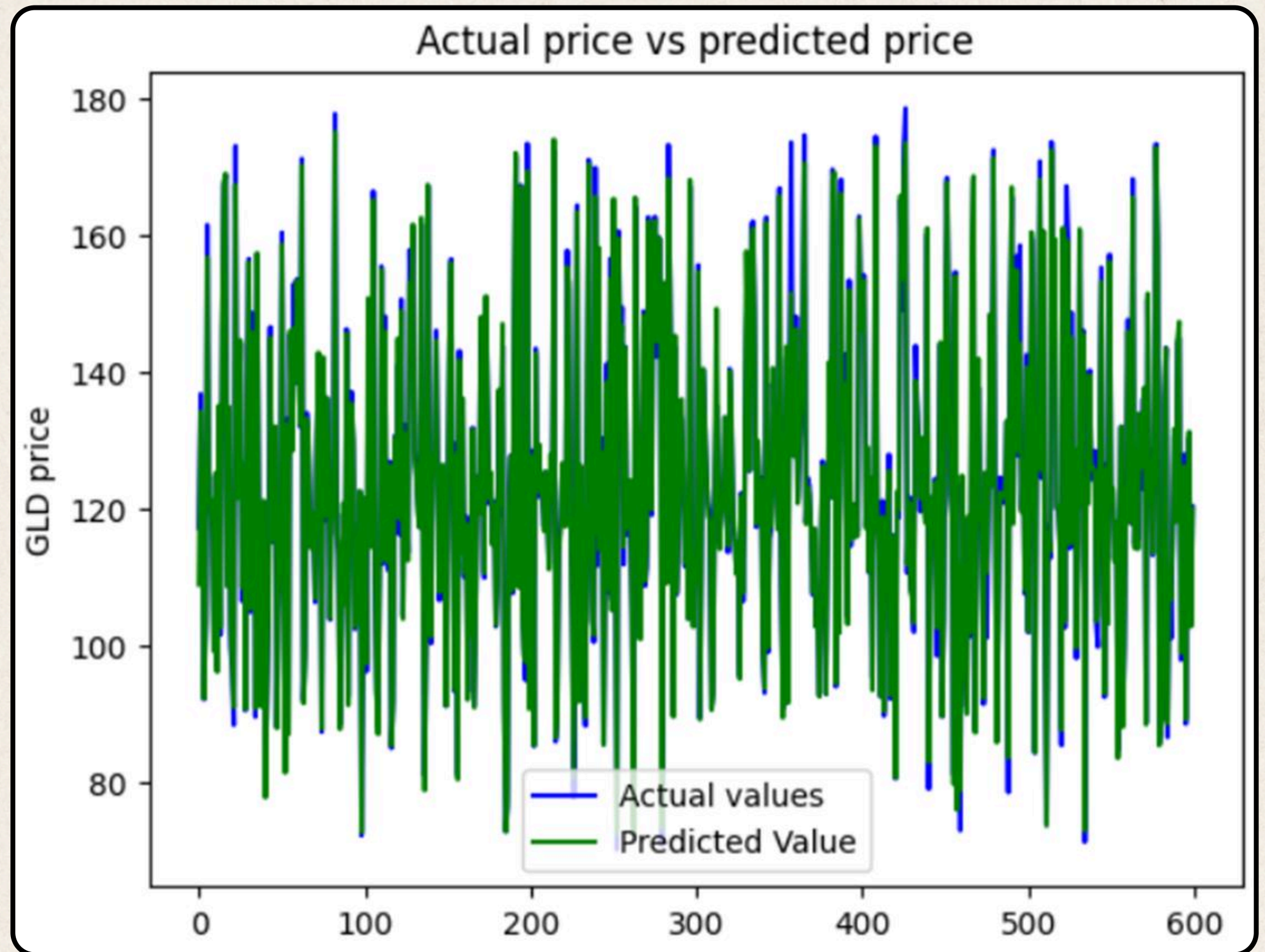
MACHINE LEARNING MODEL

Applied Regression Algorithm for prediction

- Training data used to fit the model.*
 - Testing data used for evaluation.*
- Performance evaluated using R^2 Score & Error metrics.*



Actual vs Predicted Gold Prices ➡





CONCLUSION

•***Successfully built a predictive model.***

- Strong correlation observed between actual and predicted values.*
- Machine Learning improves financial forecasting.*
- Model performance depends on data quality.*



FUTURE SCOPE ➔

- **Implement Deep Learning models (LSTM).**

- *Use real-time gold price API integration.*

- *Deploy as Web Application.*

- Enhance feature engineering for better accuracy*

Future in the past



THANK YOU

