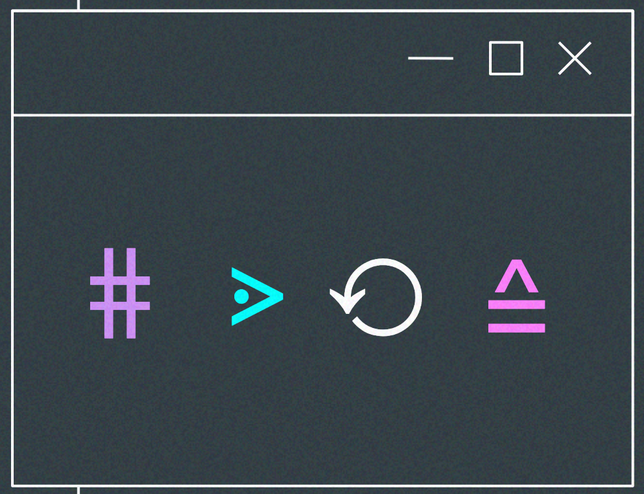
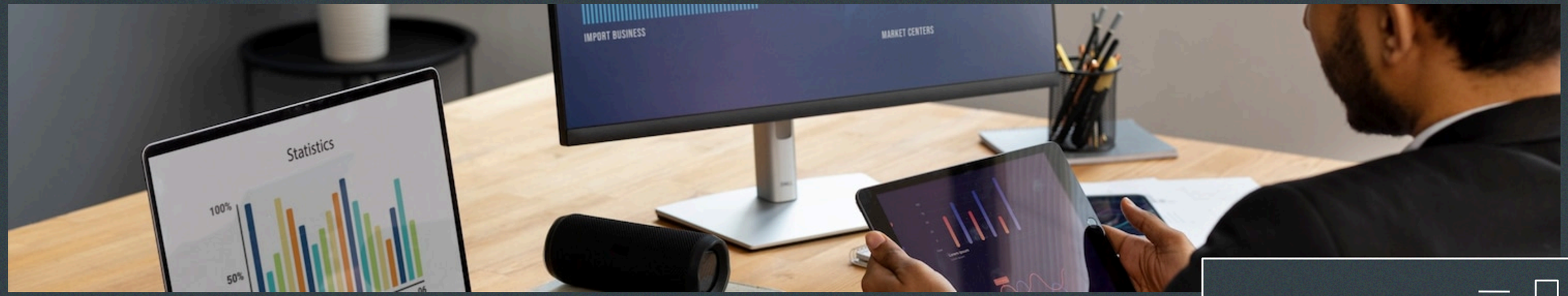
Hari Prasath's

Enhancing Stock Prediction with Deep Learning Models





Introduction

This presentation explores the use of *Deep Learning Models* to enhance **stock prediction**. We will discuss the potential of these models and their impact on the financial industry.

Agenda

Predicting stock prices is complex due to the **volatile nature** of the market and the influence of **numerous factors** such as economic indicators, company performance, and global events.

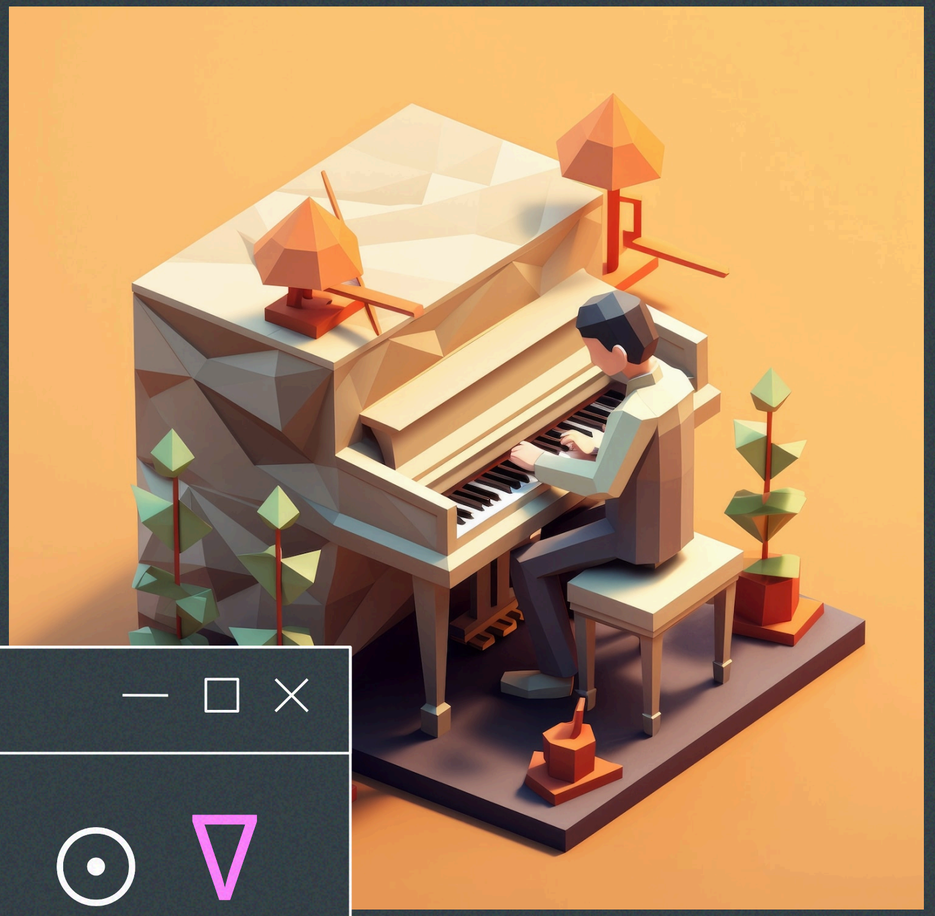
Deep Learning Fundamentals

Deep Learning involves **neural networks** that can learn from data. These models can identify **complex patterns** and relationships within large datasets, making them valuable for stock prediction.

Data Preprocessing

Before applying deep learning models, it is crucial to preprocess the data by addressing **missing values**, normalizing features, and identifying **relevant input** for the models.

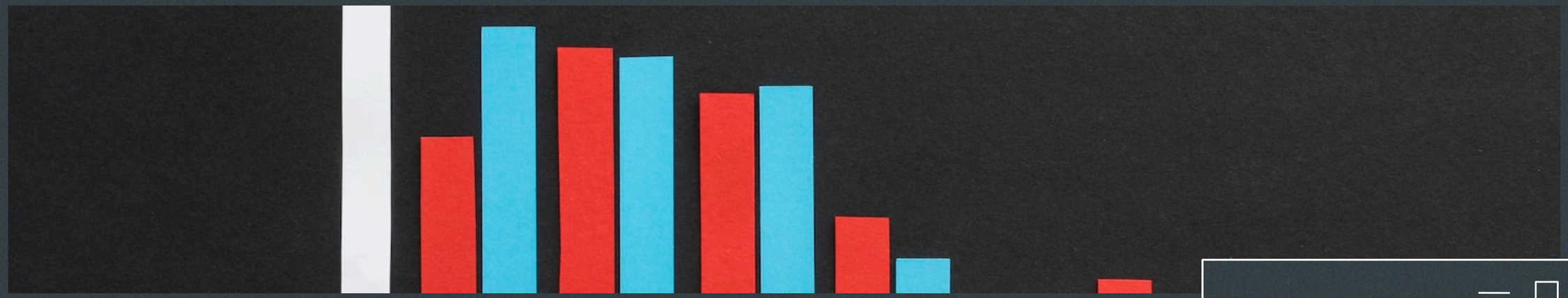
Model Selection



Selecting the right **deep learning architecture** is essential. Options include Long Short-Term Memory (LSTM) networks, Convolutional Neural Networks (CNN), and **Recurrent Neural Networks** (RNN).

Training and Validation

Training deep learning models involves **iterative adjustments** to optimize performance. Validation ensures that the model can **generalize** to new data beyond the training set.



Evaluation Metrics

Common evaluation metrics for stock prediction models include **Mean Absolute Error** (MAE), **Mean Squared Error** (MSE), and **Root Mean Squared Error** (RMSE). These metrics quantify the model's predictive accuracy.

Ethical Considerations

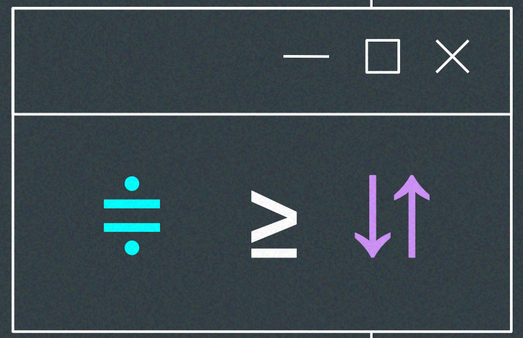
The use of deep learning in stock prediction raises ethical considerations, including the potential for **market manipulation** and the need for **transparency** in model development and decision-making.

Future Implications

Looking ahead, the integration of deep learning models in stock prediction is expected to **reshape investment strategies** and **risk management** practices. Embracing these advancements will be crucial for staying competitive in the financial markets.

Conclusion

In conclusion, deep learning models offer promising potential to enhance stock prediction. Embracing these advanced techniques can lead to **more informed investment decisions** and **improved risk assessment** in the financial sector.



Thanks!

shariprasath.in@gmail.com
panimalar institute of technology