Broke No More

Deep Learning for Financial Forecasting: Predicting Stock Prices in Dhaka Stock Exchange with LSTM

Team AI Broke-rs

Md Abdullahil Kafi Tasnimul Hasnat Abid Hasan 190041224

190041113

190041132



Introduction

For a good and successful investment, many investors are keen in knowing the future situation of the stock market. Good and effective prediction systems for stock market help traders, investors, and analyst by providing supportive information like the future direction of the stock market. In recent studies, recurrent neural network (RNN) and Long Short-Term Memory (LSTM) are being used together to make predictions of time series datasets. In this project, we will use RNN and LSTM approach to predict stock market indices of Dhaka Stock Exchange.

Motivation

- → Businesses generate large amounts of data, making it difficult for humans to process effectively.
- Machine learning provides a solution by automatically learning patterns in data and making predictions based on that data.
- → Predicting stock prices is difficult, but machine learning algorithms have shown promise in this area.
- → Although stock prices depend on many factors, machine learning algorithms can be used to provide insights and guide users in making more informed investment decisions.

Project Outcomes

The current research on prediction of stock prices has an accuracy of 55.9% as of 2017^[1]. We aim to improve this by ... Furthermore, if such accuracy can be achieved we want to explore the use of simulations to test the effectiveness of real world scenarios.

Relevant Papers & Datasets

- Stock market's price movement prediction with LSTM neural networks | IEEE Conference Publication
- Novel optimization approach for stock price forecasting using multi-layered sequential LSTM | ScienceDirect
- Stock market analysis prediction using Istm | Kaggle
- Dhaka Stock Exchange | Kaggle
- Daily data of Dhaka Stock Exchange | Kaggle
- Chittagong Stock Exchange dataset | Kaggle

Machine Learning Project

Deep Learning for Financial Forecasting: Predicting Stock Prices in Dhaka Stock Exchange with LSTM

Design Project

- Binary analysis
- Blockchain

THANKS!