



KaggleX Project Showcase

3rd Cohort | Aug. - Oct. 2023



STOCK PRICE PREDICTION USING TIME SERIES MODELS



Hagar Ibrahem



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Nasdaq, S&P 500, NYSE: What Does It All Mean?

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A graphic on the left side of the slide features a grey rocket ship with a pink pointed nose cone launching upwards. It is positioned above a large, fluffy blue cloud. Above the cloud, there is a decorative element consisting of three overlapping rounded shapes in green, yellow, and blue.

Introduction

Background



Education

- B. CompScience
- Dip. SystemDev.
- Dip. AI & ML



Extracurriculum

- Dip. DigitalTrans U.S.
- Cert. BLCU - China



Beijing Language and
Culture University



Pro. Career

- Software Developer
- Teaching Assistant-ITI
- Data Scientist



Kaggle

kaggle



Aspiration

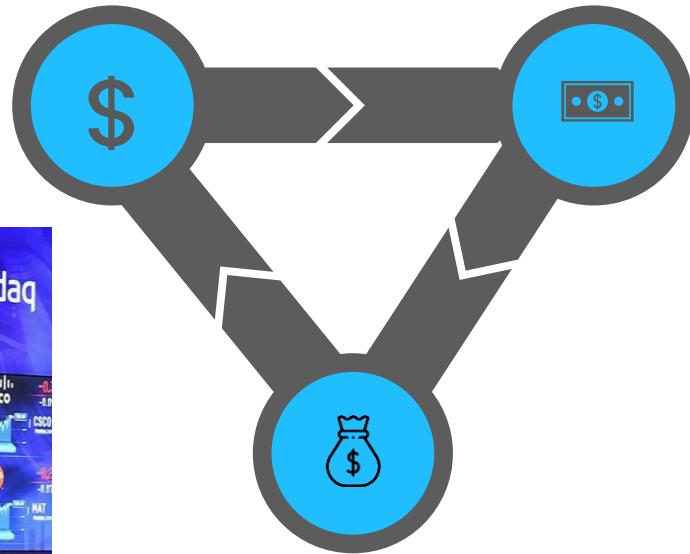




Nasdaq, S&P 500, NYSE What Does It All Mean?

Nasdaq

Focus on technology-driven companies such as Apple, Microsoft, and Amazon

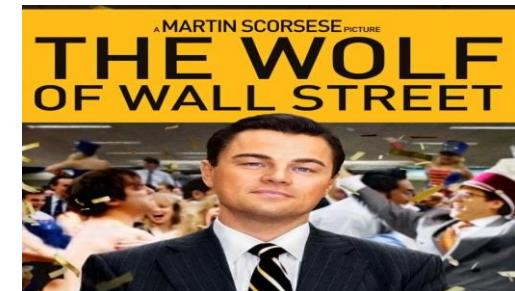


NYSE

Provides a platform for buying and selling various types of securities, including stocks, bonds, exchange-traded funds (ETFs).

S&P 500

Measures the performance of 500 large publicly traded companies in the United States.



Why It's Important !

Stock Price Prediction helps to discover the future value of company stock and other financial assets traded on an exchange.

Investors and traders may use these predictions to build strategies or enhance existing ones.





Project Objective & Workflow

Project Objective

01

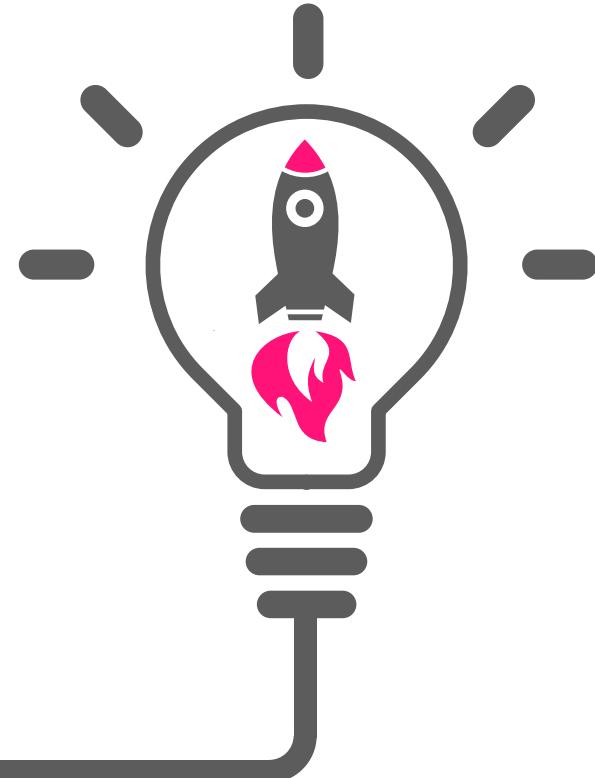
Forecasting stock prices and predicting market trends, through examining numerous time series analysis algorithms, as well as deep learning models, in order to uncover the best performer.

02

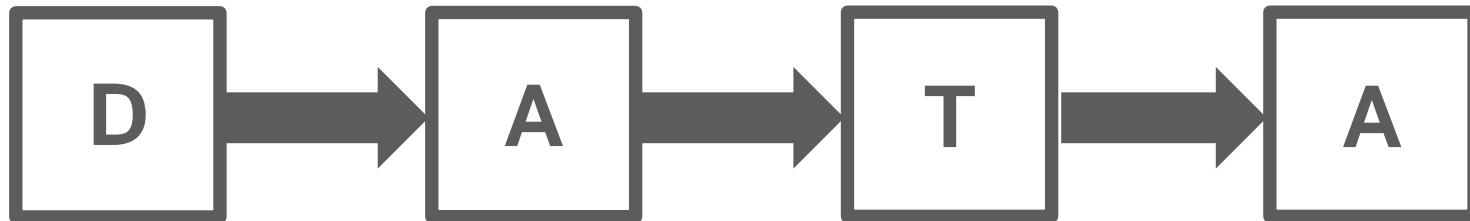
Learn the key components used in time series forecasting, and how to build various models and apply them on real-world forecasting data.

03

Data Science Topic(s) Applied: EDA for time-series data · Deep Learning · Artificial Neural Network · CNN · LSTM · Autoregressive LSTM ·



Data Card



Kaggle | Stock Market Data (NASDAQ, NYSE, S&P500)

Data Explorer
Version 74 (10.23 GB)

- stock_market_data
 - forbes2000
 - nasdaq
 - nyse
 - sp500

Summary

- 9210 files
- 29.4k columns

Updated **Weekly** for all NASDAQ, S&P500, and NYSE listed companies

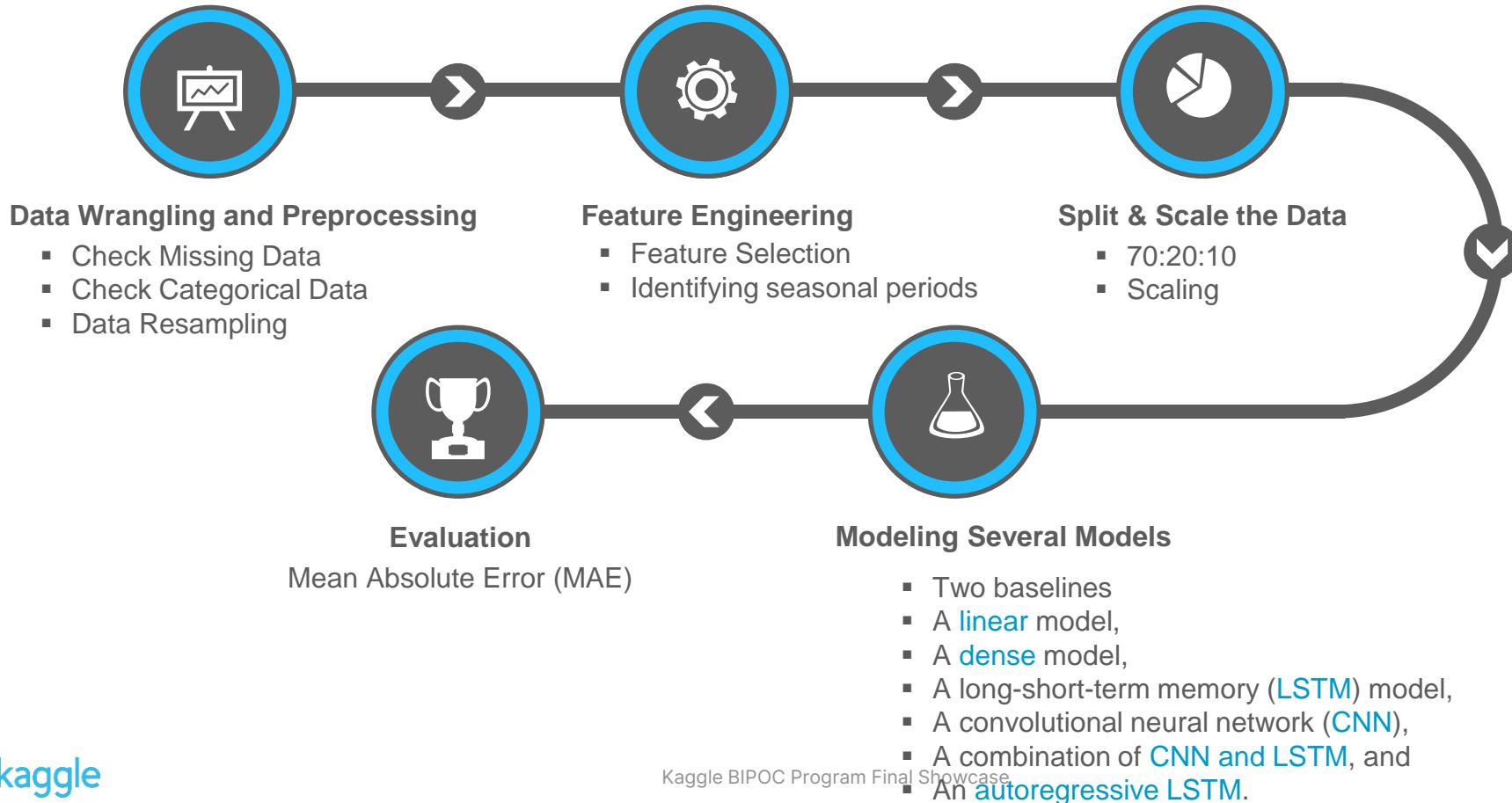
NASDAQ: American Airlines Group Inc. Common Stock (**AAL**)

Sep. 27, 2005 : Dec. 12, 2022

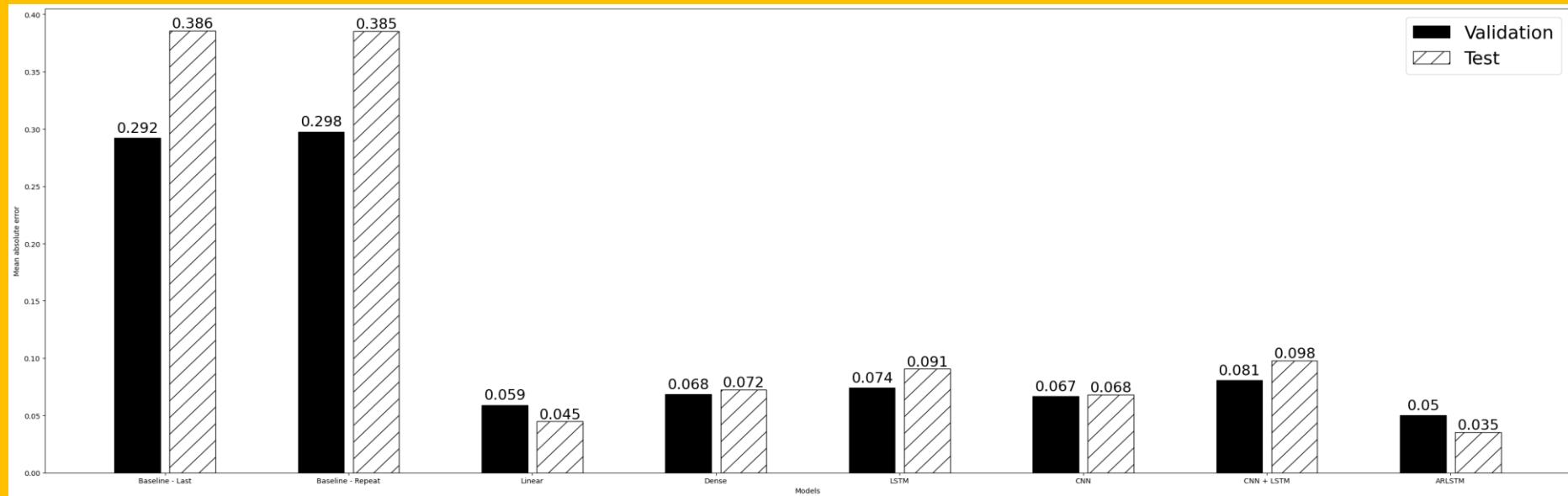
Records: **4333**
Features : **7**

-
1. Date
 2. Open
 3. Volume
 4. High
 5. Low
 6. **Close**
 7. Adjusted Close

Project Workflow



One Million-Dollar Question !



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Conclusion

Project Links & Conclusion

KaggleX 🌟 |Baselines-Linear-Dense-LSTM-CNN-ARLSTM 🎩

HAGAR BENDARY · 2D AGO · 72 VIEWS

KaggleX 🌟 | Baselines-Linear-Dense-LSTM-CNN-ARLSTM 🎩

Python · Stock Market Data (NASDAQ, NYSE, S&P500)

Notebook Input Output Logs Comments (0) Settings

Run
4.3s Version 3 of 3

Add Tags

Time-series Analysis and Stock Price Forecast Modeling 🌟 🎩

Introduction 🔑

This Notebook is part of **KaggleX BIPOC Mentorship Program - 2023** | 3rd Cohort

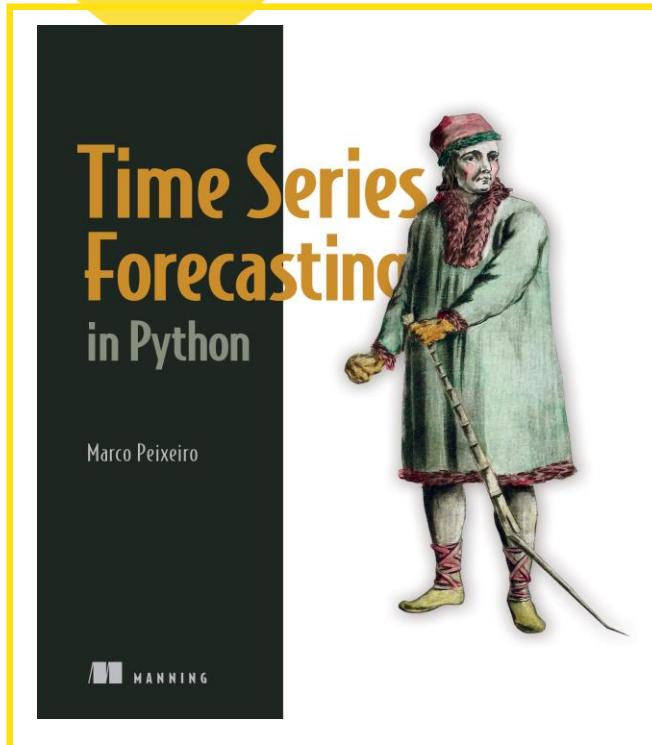
In this notebook, we'll walk through the steps of time-series forecasting using different deep learning models.

- We'll first look at the project and describe the data that we'll use.

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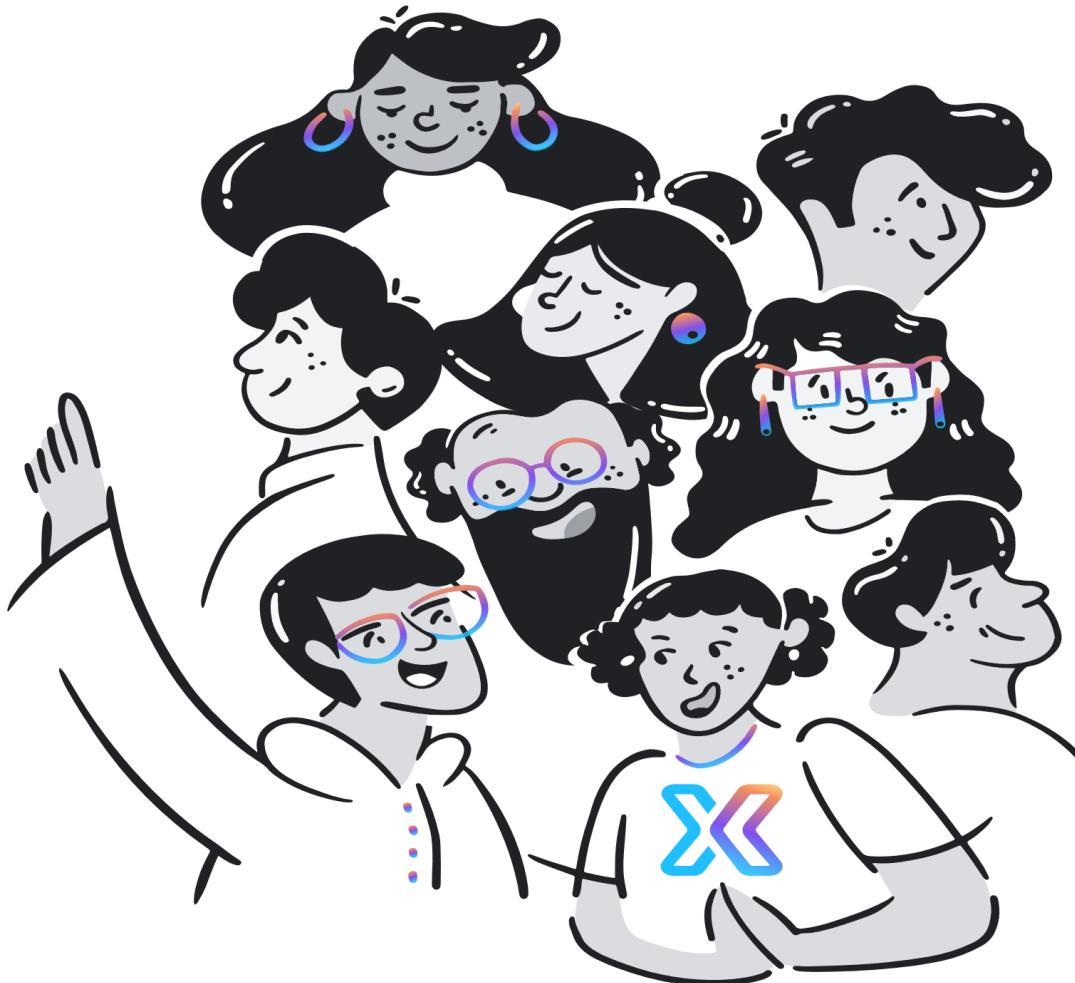
- Time-series Analysis and Stock Pri...
- Introduction 🔑
- Nasdaq, S&P 500, NYSE: What Doe...
- Project Objective & Workflow 💡 ...
- Libs & APIs 🚀
- Load Data ⏰

References





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Thanks ❤



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