[**Time Series Basics**](#_agu14093wd1o) **1**

[**ETS and Exponential Smoothing**](#_rv7iucrec9wk) **1**

[**ARIMA**](#_2y98nznt71kl) **2**

[**VARMA**](#_xs11o3cqqcg4) **2**

[**Machine Learning Methods**](#_553988pgjj8x) **3**

[**Artificial Neural Networks**](#_egtivdbztk1y) **3**

[**Convolutional Neural Networks**](#_vkrfsn73cslc) **4**

[**Recurrent Neural Networks**](#_n23tfvxv04ow) **4**

[**GARCH**](#_l7qnri2au5pq) **4**

[**AWS Forecast**](#_c4dlfcjgwx9b) **4**

[**Facebook Prophet**](#_hlp4nwolpu66) **4**

# Time Series Basics

Box-Cox

<https://colab.research.google.com/drive/1fyuSFMbddp3u6sch6cs0e6yygqLJOXeH?usp=sharing>

Price Simulation

<https://colab.research.google.com/drive/1L-P8qn2dkynKutipowBPw17StWIcRwTQ?usp=sharing>

Naive Forecast

<https://colab.research.google.com/drive/1KLyoqKeCJI7x5CANfxeBadwgnZE_3f1O?usp=sharing>

# ETS and Exponential Smoothing

SMA

<https://colab.research.google.com/drive/1xzV9700UvaoRkCD1QoL6R8_XdX1tW1In>

EWMA and Holt-Winters

<https://colab.research.google.com/drive/1-yQYYF6Rrrolj-61JFZCOigVDI4afxdx?usp=sharing>

Walk-Forward Validation

<https://colab.research.google.com/drive/1R9qvWD3u9aVL0W7wSDYzjA9NkCBCY8AD?usp=sharing>

ETS Champagne

<https://colab.research.google.com/drive/1bHO9mkum6O07QYfhum3kV3uwSyJBzLSb?usp=sharing>

ETS Stocks

<https://colab.research.google.com/drive/1DQKm7R5StnKQwYTHs3hoK_yPBvJCIx4D?usp=sharing>

# ARIMA

ARIMA [TS]

<https://colab.research.google.com/drive/1kI-TlTOzbsP7isf8Ixzzr52vcJz5cpiF?usp=sharing>

Stationarity

<https://colab.research.google.com/drive/1Ujf_QN2CvL6pu4UllW-12ORN54TF5dZO>

PACF and ACF

<https://colab.research.google.com/drive/1ZPJdPT8m6cDehzfAXbYdOmUMH2x8xy9J>

ARIMA 2

<https://colab.research.google.com/drive/1jlCrCmJjVNylpToAXkLEVkky1IN3PRUN>

ARIMA 3

<https://colab.research.google.com/drive/11f0w_ab57kBoVbI46BT025t5S5TtT63g>

ACF/PACF Stock Returns

<https://colab.research.google.com/drive/1QAHS72_JOhtcnKBYUlZ6xMvHBWu4LeZS>

ARIMA Champagne

<https://colab.research.google.com/drive/1dgDufY782K24EmbT_riyUIo_XB0VzJPL?usp=sharing>

# VARMA

VARMA Temperature

<https://colab.research.google.com/drive/1wcUMwY1uhK3jOhnDwG1vVnmTjdxbF0bv?usp=sharing>

VARMA Econometrics

<https://colab.research.google.com/drive/1arnR55gWxmXTrdQ2CJTfa6IR6qRvbbql?usp=sharing>

# Machine Learning Methods

Extrapolation

<https://colab.research.google.com/drive/19ITr4BYH7k0ZZxoeBttzhmmfoJ6qQAp3?usp=sharing>

ML Airline - No Differencing

<https://colab.research.google.com/drive/1uYQV3jJAII8m9f5ZOrTTMOW2GSpFgmBj?usp=sharing>

ML Airline - With Differencing

<https://colab.research.google.com/drive/1LFbwXIXgRSCX-mmnuyUyRwXAof8VNhY5?usp=sharing>

ML Champagne

<https://colab.research.google.com/drive/1B0TnUglvWtPc-oSNng0lKFP95DleX9Bi?usp=sharing>

ML Stocks Regression

<https://colab.research.google.com/drive/1HcRoaWwTetbcaopXmsDQUGGY1DfggzYi?usp=sharing>

ML Stocks Classification

<https://colab.research.google.com/drive/1KK4CznullvjGg6oX7G8qI8H5JQ9Lk4z3?usp=sharing>

# Artificial Neural Networks

ANN Airline

<https://colab.research.google.com/drive/1VYgc3AN3RlIGNMCq926zGOX4BrhNuZ63?usp=sharing>

ANN Stocks

<https://colab.research.google.com/drive/1r2xLYp6HdSvhBuWQp8QwhgAP38n59YbD?usp=sharing>

HAR ANN

<https://colab.research.google.com/drive/1ZAmoYGpfCjej4PBWIq2UKMAIcjR7WZql?usp=sharing>

# Convolutional Neural Networks

CNN Airline

<https://colab.research.google.com/drive/1_96MlUqYS70BKX-0rDpuGZ72XFMWgQ3c?usp=sharing>

HAR CNN

<https://colab.research.google.com/drive/1X9T24goydhYFgvcJnpg97E4-9MzUMfjy?usp=sharing>

# Recurrent Neural Networks

RNN Airline

<https://colab.research.google.com/drive/1uyRUBu1gJxb1gcVCxK_PVuzMNtbI1yEd?usp=sharing>

HAR RNN

<https://colab.research.google.com/drive/1n2f_uhmJGGh7JDbclo0t8QjHotFLnfHs?usp=sharing>

# GARCH

GARCH

<https://colab.research.google.com/drive/1NpzRGJjVbd4byeqDXxJd-_lvOqrgjKHb?usp=sharing>

# AWS Forecast

AWS Forecast Daily

<https://colab.research.google.com/drive/1CZy4SveBQ9tDe63haE2SzGW4LjtqfPkI?usp=sharing>

# Facebook Prophet

Prophet Rossmann

<https://colab.research.google.com/drive/1nh07F6gTPFNQJcO_z5cpsQFd2GGf322M?usp=sharing>

Prophet Airline

<https://colab.research.google.com/drive/1utJxgqCuTUQKjBz3y75E509QrIbggOhw?usp=sharing>

Prophet Stocks

<https://colab.research.google.com/drive/1Um2aMhGSFcsc5N1KXC5bZ8hJGfn8RpMt?usp=sharing>