

AI and Data Scientist

Mathematics

☐ Linear Algebra, Calculus, Mathematical Analysis

☐ Differential Calculus

Statistics

☐ Statistics, CLT

☐ Hypothesis Testing

☐ Probability and Sampling

Econometrics

☐ Pre-requisites of Econometrics

Fundamentals of econometrics

☐ Regressions, time series, fitting distributions

Intro to Econometrics

Coursera: Econometrics

Kaggle — Learn Time Series

Kaggle — Time Series Basics

ARIMA Model for Time Series

Time Series Models

Forecasting Task with Solution

Coursera: Linear Regression

☐ AB Testing

☐ Increasing Test Sensitivity

Minimum Detectable Effect

Paper: Improving Test Sensitivity

Paper: Improving Sensitivity (CUPED)

CUPED at Booking.com

Doordash: CUPAC

Netflix: Stratification

☐ Ratio Metrics

Microsoft: Delta Method in Metric Analytics

Paper: Ratio Metrics

Coding

☐ Learn Python Programming Language

Learn Python - Kaggle

Google's Python Class

☐ Data Structures and Algorithms (Python)

Algorithmic Exercises

Study Plans - Leetcode

Algorithms Specialization

☐ Learn SQL

SQL Tutorial

Exploratory Data Analysis (EDA)

☐ Data understanding, Data Analysis, Vizualisation

Exploratory Data Analysis With Python and Pandas

Exploratory Data Analysis for Machine Learning

Exploratory Data Analysis with Seaborn

Machine Learning

☐ Classic ML (Sup. and Unsup.) Advanced ML (Ensembles, NNs)

Open Machine Learning Course - OpenDataScience

Machine Learning Specialization

Pattern Recognition & ML by Christopher m. bishop

Deep Learning

☐ Fully connected NN, CNN, RNN, LSTM, Transformers, Transfer Learning

Deep Learning Specialization

Deep Learning Book

Attention is all you need

The Illustrated Transformer

MLOps

☐ Deployment models, CI/CD

MLOps Specialization

Courses

Keep Learning