

AI and Data Scientist

This roadmap was created by the AI and DS team at Careem (an Uber company). Shout out to the creators @mohamadtweets and @BulatShkanov

Find the detailed version of this roadmap along with resources and other roadmaps

<https://roadmap.sh>

Mathematics

☐ Linear Algebra, Calculus, Mathematical Analysis

Mathematics for Machine Learning

Courses

☐ Differential Calculus

Coursera: Algebra and Differential Calculus

Course

Econometrics

☐ Pre-requisites of Econometrics

Fundamentals of econometrics

Book

☐ Regressions, time series, fitting distributions

Intro to Econometrics

Book

Coursera: Econometrics

Course

Kaggle — Learn Time Series

Course

Kaggle — Time Series Basics

Tutorial

ARIMA Model for Time Series

Tutorial

Time Series Models

Tutorial

Forecasting Task with Solution

OpenSource Project

Coursera: Linear Regression

Course

Coding

☐ Learn Python Programming Language

Learn Python - Kaggle

Course

Google's Python Class

Course

☐ Data Structures and Algorithms (Python)

Algorithmic Exercises

Tutorial + Challenges

Study Plans - Leetcode

Challenges

Algorithms Specialization

Course

Statistics

☐ Statistics, CLT

Coursera: Introduction to Statistics

Course

☐ Hypothesis Testing

Coursera: Hypothesis Testing

Course

☐ Probability and Sampling

Coursera: Probability and Statistics

Course

☐ AB Testing

Practitioner's Guide to Statistical Tests

Article

Experiment Design Article

Article

☐ Increasing Test Sensitivity

Minimum Detectable Effect

Article

Paper: Improving Test Sensitivity

Paper

Paper: Improving Sensitivity (CUPED)

Paper

CUPED at Booking.com

Article

Doordash: CUPAC

Article

Netflix: Stratification

Paper

☐ Ratio Metrics

Microsoft: Delta Method in Metric Analytics

Paper

Paper: Ratio Metrics

Paper

Exploratory Data Analysis (EDA)

☐ Data understanding, Data Analysis, Visualization

Exploratory Data Analysis With Python and Pandas

Course

Exploratory Data Analysis for Machine Learning

Course

Exploratory Data Analysis with Seaborn

Course

Machine Learning

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

