AI and Data Scientist

Mathematics

- [ ] Linear Algebra, Calculus, Mathematical Analysis
  - Mathematics for Machine Learning
- [ ] Differential Calculus
  - Algebra and Differential Calculus

Statistics

- [ ] Statistics, CLT
  - Introduction to Statistics
- [ ] Hypothesis Testing
  - Hypothesis Testing
- [ ] Probability and Sampling
  - Probability and Statistics
- [ ] AB Testing
  - Practitioner's Guide to Statistical Tests
  - Experiment Design Article
- [ ] Increasing Test Sensitivity
  - Minimum Detectable Effect
  - Improving Test Sensitivity
  - Improving Sensitivity (CUPED)
  - CUPED at Booking.com
  - Doordash: CUPAC
  - Netflix: Stratification
- [ ] Ratio Metrics
  - Delta Method in Metric Analytics
  - Ratio Metrics

Biostatistics

- [ ] Pre-requisites of Biostatistics
  - Fundamentals of biostatistics
- [ ] Regressions, time series, fitting distributions
  - Learn Time Series
  - Time Series Basics
  - ARIMA Model for Time Series
  - Time Series Models
  - Forecasting Task with Solution
  - Linear Regression
  - Logistic Regression

Coding

- [ ] Learn Python Programming Language
  - Learn Python
- [ ] Data Structures and Algorithms (Python)
  - Algorithmic Exercises
  - 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)
  - Basic Machine Learning
  - Machine Learning Specialization
  - Pattern Recognition & ML

Deep Learning

- [ ] Fully connected NN, CNN, RNN, LSTM, Transformers, Transfer Learning
  - Deep Learning Specialization
  - Transformer

MLOps

- [ ] Deployment models, CI/CD
  - MLOps Specialization

Keep Learning