

Twitter Thread by elvis

elvis

@omarsar0



Recently, I shared a list of some courses that were useful in my transition to machine learning.

While I took most of the courses in person, there are some alternative online courses you can check out.

Here is a thread of a few interesting online courses based on the list:

■■ Linear Algebra ■■

A classical online course by Professor Gilbert Strang based on his popular textbook "Introduction to Linear Algebra". Learn about matrix theory and systems of equations.

<https://t.co/GarhvVxXhG>

■■ Introduction to Complex Analysis ■■

Learn about the geometry of complex numbers.

<https://t.co/DgMuMCgAhr>

■■ Differential Calculus ■■

Pay close attention to the chain rule as it's heavily referenced in machine learning, specifically when discussing optimization. This course is part of a specialization called MathTrackX. I recommend checking that as well.

<https://t.co/H4hK05t44b>

■■ Information Theory ■■

When you are working with machine learning algorithms applied to data you are dealing with information processing which in essence relies on ideas from information theory such as entropy. This course should provide the basics.

<https://t.co/ETeMiwTry1>

■ ■ Data Mining Specialization ■ ■

The courses in this specialization provide a great overview of data mining techniques used for structured and unstructured data.

<https://t.co/oGzoOGOMnU>

■ ■ Algorithms ■ ■

In machine learning, we are programming sophisticated algorithms and it's important to understand key concepts in this subject before jumping straight into ML algorithms. In general, an Algorithms course builds a strong CS foundation.

<https://t.co/bdlXphoJud>

■ ■ Mathematics for Machine Learning Specialization ■ ■

Note: Includes courses for multivariate calculus and linear algebra. One of my favorite courses due to the quality of lectures and focused topics.

<https://t.co/3Uf3iuni3z>

■ ■ Statistics with Python Specialization ■ ■

This course is focused on the basics of statistics which is important when dealing with uncertainties, modeling, inference, etc. Although the courses focus on Python, there are other options using R as well.

<https://t.co/yZOUQBTZNI>

■ ■ An Intuitive Introduction to Probability ■ ■

Probability can become a difficult topic but it's a core concept of building probabilistic prediction models. This course can provide an intuitive introduction to core topics like conditional probability.

<https://t.co/sGirM58T9p>

Exposure to topics in these courses can help improve your knowledge/intuition needed to transition to machine learning.

The list is not exhaustive so if you have any courses you recommend, please reply below. In time, I will prepare a better and more focused ramping up guide.