CS Get-Skilled Academy

Machine Learning

How to study ML?

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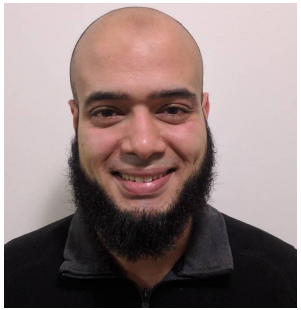

DSA vs Machine Learning

Programming, Data Structures & Algorithms	Machine Learning
• Programing topics are well connected • DSA topics have weak dependency	• ML **framework** has high dependency • ML **algorithms** have weak dependency
• Syntax is the easy part • Most of your time in problem-solving	• Most of your time in the **theory** • Coding is easy if you are *good* programmer
• Practice is your key to understand • Practice makes perfect	• Reviewing and summarizing is your key to understand + fair practice
• Try to prepare before lectures • We forget and need to review • Explore other materials if you don't understand	• Try to prepare before lectures • We forget and need to review • Explore other materials if you don't understand

Lectures

- Before the lecture
  - Iterate on the next slides
  - Think little about them
- Once we finished a lecture
  - Review it as soon as possible!
  - Repeat or consider googling for other materials
    - Medium.com has great articles
    - Youtube has many lectures and courses

ToDo Approach

- Not every concept is a blocking concept
- Accept that something might be hard
- After a serious trial, put them in your ToDos
- Come Back later for them!
- Learning has 2 properties
  - It is accumulative!
  - It needs flexibility!

Hands-on ML books

- I did not read. However, you might consider
- Machine Learning in Action - Peter Harrington

Strong Theoretical Machine Learning Books

- There are 3 very **remarkable** ML books (**heavy**)
- Pattern Recognition and Machine Learning - Christopher M. **Bishop** [**download**]
- Machine Learning: A Probabilistic Perspective by Kevin P. **Murphy**
- An Introduction to Statistical Learning - Gareth **James**, etal
  - 2021 2nd edition - Free
  - Less math than next one
- The Elements of Statistical Learning, Trevor **Hastie**, etal
  - 2017, 2nd edition - Free

"Acquire knowledge and impart it to the people."

"Seek knowledge from the Cradle to the Grave."