Summer plans & works to do

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1 Overview

Well summer, **the season of progress**. The season to learn new things and focus on what you really want and build your career.

After spending two semester in the university, it is clear that meanwhile studying, learning **new** things, is hard! It's possible but it's hard. So summer is the time which I have to value a lot and do my best to use it right.

At the time of writing this, there are 5 days remaining of the 1401 year, a long and hard year both for Iran, my love, and myself. I learned and grew a lot during this year. I spend a whole semester in university, experienced a really *Randomly-Generated-but-Related* journey. Studied a lot, learned how to study well and meet many new and nice people.

But after all, I have to create a path to my actual career! After working and searching I finally made my decision and chose: Data Science. I really like this field, it's very amazing but hard to learn :) Besides this, I wanna learn backend engineering as well, 'cause it is much faster (faster to get result, lol) and has a slightly smaller learning curve.

The deep learning course needs a book nearby so the first book is *Deep Learning for Coders With Fastai and PyTorch*. Refreshing my Python skills is something that I never miss and enjoy a lot, and the most recent book which is published is *Python Distilled* by *David Beazly*. But I have to make a dicision Watching video courses and reading books are the main activities of the summer, but without spending or more precisely, acquiring time to rest, nobody can learn anything; listening to music and podcast and watching movies are the main non-active things and biking is the main physical activity of summer.

2 Courses

These are the video courses

2.1 Deep learning

The nice deep learning course is at https://course.fast.ai/.

Practical Deep Learning

A free course designed for people with some coding experience, who want to learn how to apply deep learning and machine learning to practical problems.

This free course is designed for people (and bunnies!) with some coding experience who want to learn how to apply deep learning and machine learning to practical problems.

Each lesson of the course has a video and a dedicated page of the website, like Lesson 1.

Notes:

- Each video is pretty long, on average they last one hour and 30 minutes! The longer the video, the more knowledge they contain AND the more attention they need AND the more practice as well.
- Each lesson has a *How to complete lesson N* section (like https://course.fast.ai/Lessons/lesson1.html#how-to-complete-lesson-1,) in which says: *As well as watching the video and working through the notebooks, you should also read the relevent chapter(s) of the fast.ai book, Practical Deep Learning for Coders. Each lesson will tell you what chapter you need to read, just below the video*

After all, the dedicated time and effort must be huge.

2.2 FastAPI

FastAPI framework, high performance, easy to learn, fast to code, ready for production

We all know FastAPI and there is no need for more introduction. The course I wanna watch is this course.

The course is a 19-hour long video which is downloaded and cut already. The important things are:

- The course is created one year ago and it is slightly outdated, so the documentation must be read along the course.
- Course will just show you how to use FastAPI and the real learning happens when doing projects.
- It's good to define nice projects whenever I came to an idea e.g. *The API to send pictures of https://unsplash.com to my friends* :)

3 Books

3.1 Deep Learning for Coders With Fastai and PyTorch

must-read near-seven-hundred-pages 297 T

Deep learning is often viewed as the exclusive domain of math PhDs and big tech companies. But as this hands-on guide demonstrates, programmers comfortable with Python can achieve impressive results in deep learning with little math background, small amounts of data, and minimal code. How? With fastai, the first library to provide a consistent interface to the most frequently used deep learning applications show you how to train a model on a wide range of tasks using fastai and PyTorch.

You'll also dive progressively further into deep learning theory to gain a complete understanding of the algorithms behind the scenes. Train models in computer vision, natural language processing, tabular data, and collaborative filtering Learn the latest deep learning techniques that matter most in practice Improve accuracy, speed, and reliability by understanding how deep learning models work Discover how to turn your models into web applications Implement deep learning algorithms from scratch Consider the ethical implications of your work

As a 622-page and comprehensive book, it needs attention and time. The book may get printed, just to be read easily.

3.2 Fluent Python

later-to-read near-one-thousand-pages 505 T

Python's simplicity lets you become productive quickly, but often this means you aren't using everything it has to offer. With the updated edition of this hands-on guide, you'll learn how to write effective, modern Python 3 code by leveraging its best ideas. Don't waste time bending Python to fit patterns you learned in other languages. Discover and apply idiomatic Python 3 features beyond your past experience. Author Luciano Ramalho guides you through Python's core language features and libraries and teaches you how to make your code shorter, faster, and more readable.

Featuring major updates throughout the book, Fluent Python, second

edition, covers:

1. Special methods: The key to the consistent behavior of Python objects
2. Data structures: Sequences, dicts, sets, Unicode, and data classes
3. Functions as objects: First-class functions, related design patterns, and type hints in function declarations
4. Object-oriented idioms: Composition, inheritance, mixins, interfaces, operator overloading, static typing and protocols
5. Control flow: Context managers, generators, coroutines, async/await, and thread/process pools
6. Metaprogramming: Properties, attribute descriptors, class decorators, and new class metaprogramming hooks that are simpler than meta-classes

3.3 Build a Career in Data Science

later-to-read near-five-hundred-pages 194 T

What are the keys to a data scientist's long-term success? Blending your technical know-how with the right "soft skills" turns out to be a central ingredient of a rewarding career.

Build a Career in Data Science is your guide to landing your first data science job and developing into a valued senior employee. By following clear and simple instructions, you'll learn to craft an amazing resumé and ace your interviews.

In this demanding, rapidly changing field, it can be challenging to keep projects on track, adapt to company needs, and manage tricky stakeholders. You'll love the insights on how to handle expectations, deal with failures, and plan your career path in the stories from seasoned data scientists included in the book.

What's Inside: • Creating a portfolio of data science projects • Assessing and negotiating an offer • Leaving gracefully and moving up the ladder • Interviews with professional data scientistsFor readers who want to begin or advance a data science career

Emily Robinson is a data scientist at Warby Parker.Jacqueline Nolis is a data science consultant and mentor.

3.4 Inside the Python Virtual Machine

better-to-read near-two-hundred-pages 108 T

Inside the Python Virtual Machine provides a guided tour under the covers of the Python interpreter for the curious pythonista. It attempts to show the user what happens from the moment the user executes a piece of Python code to the point when the interpreter returns the result of executing the piece of code.

This book will provide the readers with an understanding of the various processes that go into compiling and executing a python program removing most of the mystery surrounding how the python interpreter executes source code.

The books starts out with a description of the compilation phase with emphasis on the less generic parts of the compilation phase. It then proceeds to discuss python objects and their implementation in CPython. This is followed by a discussion of various objects types that are central to the interpreter such as frame objects and code objects. The process of evaluating code objects by the interpreter loop is also discussed as well as how to extend the Python programming language with your own constructs.

3.5 CPython Internals

better-to-read near-five-hundred-pages 209 T

CPython Internals: Your Guide to the Python 3 Interpreter.

Are there certain parts of Python that just seem like magic? Once you see how Python works at the interpreter level, you'll be able to optimize your applications and fully leverage the power of Python.

In CPython Internals, you'll unlock the inner workings of the Python language, learn how to compile the Python interpreter from source code, and cover what you'll need to know to confidently start contributing to CPython yourself!

4 Habits

4.1 Podcast time-to-time activity

Listening to old and new Python podcasts, specially from *Talk Python to Me* channel helps a lot, It provides many information, introduces mane new technologies and brings many good people to the show.

4.2 Music always

As always: *I live because of my musics* :)

4.3 Films weekends rest

Watching new films and series, enjoys a LOT. The dedicated series which I want to watch is *The Mentalist*. A TV show which remembers me of Sherlock!

Also I will download the films which I haven't watch in 1080p quality and enjoy the leisure :)

4.4 Biking time-to-time activity

Physical activity to become fresh again, and to empty the mind outta the learned stuff is really important and Biking has to be done in summer.