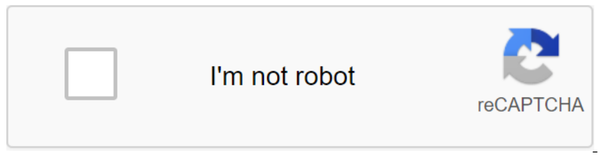

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Fundamentals of python book pdf

The newest Humble Book Bundle is now available, and this time it's all about learning the Programming Language Python, which happens to be one of the best places to start programming training, and one that has always had a special place in my heart because of its popular on Raspberry Pi.Dear Lifehacker, with all the buzz about learning code, I decided to give it a try. Teh... Read moreThe full collection includes almost all starch-free Press Python books, including beginner-style books like Teach Your Kids Code and Python Crash Course, and more advanced books like Black Hat Python, Inventing Your Own Computer Games with Python, and Grey Python Hat. As in previous bundles, the books are divided into three tiers, $1, $8, and a $15 package. The Python Crash Course is included in the $15 levels, and the bundle is worth it for this book alone. You really don't have to take my word for it though, it has great reviews on Amazon and is pretty consistently a bestseller in the programming category. If you've been curious about various hacking tools and you're tired of having a measly childish script, then both Black Hat Python and Grey Hat Python are great introductions to using Python for both purposes. In addition, you'll have a much better understanding of basic security by the time you finish both books. You have two weeks to catch the entire collection from the humble book Bundle.Humble Book Python Bundle Mastering Machine Learning is not easy, even if you're a crack programmer. I've seen a lot of people come from a solid background writing software in various fields (games, web, multimedia, etc.) thinking that adding machine learning to your skill list is another walk in the park. No. And each of them was alarmed. I see two reasons why machine learning problems are misunderstood. First, as the name implies, machine learning is software that learns by itself, rather than being instructed by the developer on each rule. It is a simplification that many media have little to no say about the actual problems writing machine learning algorithms often use when it comes to trading ML. Read: How the Dutch government uses data to predict weather and prepare for natural disasters The second reason, in my opinion, are many books and courses that promise to teach you everything and everything from machine learning to a few hundred pages (and ads on YouTube that promise a clean machine learning job if you take an online course). Now, I'm not that to denigrate any of these books and courses. I've reviewed some of them (and will consider a few more in the coming weeks) and I think they are invaluable sources in order to become a good machine learning developer. But they are not enough. Machine learning requires both coding and mathematical skills, as well as deep deep deep different types of algorithms. If you are doing Python machine learning, you should have a deep knowledge of many libraries as well as master many methods of programming and managing memory language. And contrary to what some people say, you can't escape math. And all this cannot be summed up in a few hundred pages. Instead of one volume, a complete guide to machine learning is likely to look like Donald Knut's famous Art of Computer Programming series. So, what's this all the tirade for? In my research into data science and machine learning, I'm always on the lookout for books that take a deep dive into topics that skim more common, all-encompassing books. In this post, I'll be looking at Python for data analysis and practical statistics for data scientists, two books that will help deepen your team of coding and mathematical skills required to master Python machine learning and data science. Python data analysis python data analysis, 2nd edition, is written by Wes McKinney, creator of Pandas, one of the key libraries that use Python machine learning. Machine learning at Python involves downloading and pre-processing data in pandas before feeding them to your models. In Python for data analysis, McKinney takes you through all the panda functionality and manages to do so without making it read as a reference guide. There are many interesting examples that build on each other and help you understand how different panda features link together. You'll go in depth on things like cleaning, joining, and visualizing datasets, topics that are usually only briefly discussed in most machine learning books. Most books and machine learning courses provide introductions to basic panda components such as DataFrames and Series, as well as some key features such as downloading data from CSV files and clearing lines with missing data. But the power of pandas is much wider and deeper than what you see in the chapter worth of code samples in most books. You can also explore some very important issues, such as memory management and code optimization, which can be a big deal when you process very large datasets in machine learning (which you often do). What I also like about the book is the sophistication that went into choosing items to fit in 500 pages. Although much of the book is devoted to pandas, McKinney took care to supplement it with materials about other important libraries and Themes of Python. You'll get a good overview of massively-oriented programming with numpy, another important Python library, often used in machine learning in concert with pandas, and some important techniques in using Jupyter Notebooks, a tool of choice for many scientists processing data. All this said, don't expect Python for data data be a very fun book. This can get boring because it just discusses working with data (which happens to be the most boring part of machine learning). There won't be any complicated examples where you get to see the result of learning and using a machine learning algorithm or integrating patterns into real applications. My recommendation: You should probably pick up a Python for data analysis after going through one of the introductory or cutting-edge books on data science or machine learning. Having that introductory background about working with Python machine learning libraries will help you better understand the techniques put in the book. Practical Statistics for Data Scientists While Python for Data Analysis improves your data processing and coding skills, the second book we will be reviewing, Practical Statistics for Data Scientists, 2nd Edition, will be the perfect resource to deepen your understanding of the basic mathematical logic of many key algorithms and concepts that you often deal with when performing data science and machine learning. But again, the key here is specialization. The book begins with simple concepts such as different types of data, tools and medians, standard deviations and percentile. It then gradually takes you through more advanced concepts such as different types of distributions, sampling strategies, and value testing. All these concepts you probably learned in a math class or read about in data science and machine learning books. On the one hand, the depth that practical statistics for data scientists brings to each of these topics is greater than you'll find in machine learning books. On the other hand, each topic is introduced along with coding examples in Python and R, making it more appropriate than classic statistical textbooks. In addition, the authors have done a great job of masking how different terms are used in data science and other fields. Each theme is accompanied by a box that provides all different synonyms for popular terms. As you go deeper into the book, you will immerse yourself in the mathematics of machine learning algorithms such as linear and logistical regression, K-coming neighbors, trees and forests, and K-media clustering. In each case, as in the rest of the book, more attention is paid to what happens under the hood of the algorithm, rather than using it for applications. But the authors again found that chapters are not read like classic math textbooks, and formulas and equations are accompanied by good examples of coding. Like Python for data analysis, practical statistics for data scientists can get a little boring if you read it from end to end. There are no interesting applications or a continuous process in which you build your code through But on the other hand, the book was structured in such a way that you can read sections on their own without having to go through previous chapters. My recommendation: Read the practical statistics for data scientists after you enter the introductory book on data science and machine learning. I definitely recommend reading the whole book once though, to make it more enjoyable, go the topic in between researching other machine learning courses. Also, keep it handy. You will probably go back to some chapters from time to time. Some final thoughts I would definitely count Python for data analysis and practical statistics for data scientists like the two are sure to read for those who are on the path of learning data science and machine learning. While they may not be as exciting as some of the most practical books, you will appreciate the depth they add to your coding and math skills. This article was originally published by Ben Dixon on TechTalks, a publication that examines technology trends, how they affect the way we live and do business, and the problems they solve. But we're also discussing the evil side of technology, the darker implications of new technologies and what we need to look at. You can read the original article here. Published July 8, 2020 - 09:49 UTC End of The Line! Python doesn't pre-package with Windows, but that doesn't mean Windows users won't find a flexible programming language useful. It's not quite as easy as installing the newest version however, so let's make sure you get the right tools for the task at hand. First released in 1991, Python is a popular high-level programming language used for general purpose programming. Thanks to a design philosophy that emphasizes readability, it has long been a favorite hobby of programmers and serious programmers. Not only is it a simple language (comparatively speaking, that is) to pick up, but you'll find thousands of projects online that require you to have a Python set to use the program. What version do you need? Unfortunately, a few years ago there was a significant update of Python, which created a big rift between versions of Python. This may make things a little confusing for beginners, but don't worry. We'll get you through installing both major versions When you visit the Python Download Page for Windows, you'll immediately see the separation. Right at the top, square and center, the repository asks if you want the latest release of Python 2 or Python 3 (2.7.13 and 3.6.1, respectively, as of this tutorial). RELATED: Add dungeons, ruins, and treasure hunting to your Minecraft world with MCDungeon New Better, right? Maybe so, maybe not. The version you want depends on your goal. Let's say, for example, that you're reading our article about expanding World Minecraft with MCDungeon and are excited to add interesting things to your worlds. This project is encoded in Python and requires Python 2.7 2.7 launch the MCDungeon project with Python 3.6. In fact, if you are studying hobby projects like MCDungeon, you will find that almost all of them use 2.7. If your goal is to get some project that ends in .py extension and works, then there is a very, very good chance that you need 2.7 for it. On the other hand, if you want to actually learn Python, we recommend installing both versions side by side (which you can do with zero risk and just a tiny bit of installation hassle). This allows you to work with the latest version of the language, as well as run old Python scripts (and test backward compatibility for new projects). Comparing the two versions is an article in itself though, so we'll put it off on the Python Wiki project where you can read their well-written review of the differences. You can only download Python 2 or Python 3 if you're sure you only need a specific version. We go the distance today and will be installing both of them, so we recommend you download both versions and do the same. Under the main entry for both versions, you'll see the x86-64 installer, as shown below. What is the difference between 32-bit and 64-bit Windows? This installer will install the appropriate 32-bit or 64-bit version on your computer automatically (here are some further readings if you want to learn more about the differences between them). How to install the Python 2 Python 2 installation is a snap, and unlike in years past, the installer even set the way variable for you (something we'll get in a little later). Download and run the installer, select Set for all users, and then click next. On the catalog selection screen, leave the catalog as Python27 and click Next. On the customization screen, scroll down, click add python.exe to the path, and then select Will be mounted on your local hard drive. When you are done, click next. You don't have to make any more decisions after that moment. Just click through the master to complete the installation. When the installation is finished, you can confirm the installation by opening Command Prompt and typing the following command: python-V Success! If all you need is Python 2.7 for a project, you can stay right here. It is set, a variable path is set and you have gone to the race. How to install Python 3 If you want to know the newest version of Python, you need to install Python 3. You can install it along with Python 2.7 with no problem, so go ahead and download and run the installer now. On the first screen, turn on the Add Python 3.6 option to PATH, and then click set now. Next, you have to make a decision. Clicking the Limiting The Length of the Triple removes the MAX_PATH variable limit. This change will not break anything, but will allow long path names. Because many Python programmers work in Linux and other nix systems where the length of the path name is not a problem, including this in advance can help mitigate any trajectory problems that may occur while working in Windows. ANSWER: How to make Windows 10 Take File Ways over 260 characters We recommend going ahead and choosing this option. If you know you don't want to unplug the length limit, you can just press the Close button to finish the installation. And, if you want to know more about the problem before making changes, read here. If you only install Python 3, you can use the same command line trick entering python-v that we used above to check that it is set correctly and the variable path is set. If you install both versions, however, you need to do a quick setup to find in the next section. Adjust system variables so you can access both python versions from the command line This section of the tutorial is completely optional, but will allow you to quickly access both versions of Python from the command line. After installing both versions of Python, you may have noticed a small quirk. Although we've included a system path for both Python installations, the python input in the command hint indicates only Python 2.7. The reason for this is simple: the variable (whether automatically adjusted by the installer or hand tuned) simply points to the catalog, and each one performed in this catalog becomes a command line. If you list two directories and both have a python.exe file in them, which directory is not higher in the variable list. And, if there is a variable set for the system and the user, the way the system takes precedence over the user path. The latter is exactly what happens in this case: The Python 2 installer edited the system to a broad variable and the Python 3 installer added a variable user level, and we can confirm this by looking at the variable Windows environments. Hit Start, enter advanced system settings, and then select the Option View Advanced System Settings. In the System Properties window, which opens in the Advanced tab, click the Environmental Variable button. Here you can see the Python 3 listed in the User Variables and Python 2 section listed in the System Variables section. There are several ways you can fix this situation. The easiest (albeit with the least functionality) is to simply delete the entry for the Python version you plan to use the least. Although it's simple, it's also not much fun. Instead, we can make another change that will give us access to the python for Python 2 and python3 for Python 3. To do this, we'll get the file manager and go to the folder, you installed Python 3 3 default). Make a copy of the python.exe file and rename this copy (not the original) in python3.exe. Open a new team query (environmental variables are updated with each new team, tells you to open) and in the air python3 -version. Boom! Now you can use the python command in Command Prompt when you want to use Python 2.7 and the python3 command when you want to use Python 3. ANSWER: How to edit the PATH system for easy command line access in Windows If, for whatever reason, you don't find this satisfactory solution, you can always change the order of environmental variables. Be sure to brush up with our tutorial first if you're not comfortable editing these variables. Note, however, that no matter what method you use, it is important to leave the original python.exe intact because applications in /scripts/sub-direction for both versions of Python rely on that file name and fail if it is not available. After a little setup and a little tweaking, you have both versions installed and you're ready for any Python project you want to tackle. Solutions. fundamentals of python programming book. richard halterman book fundamentals of python programming