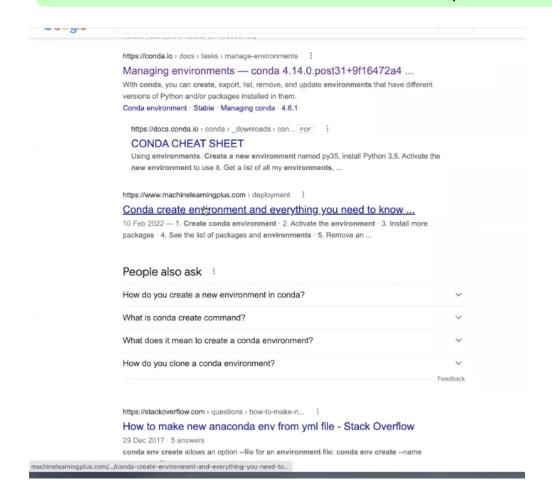
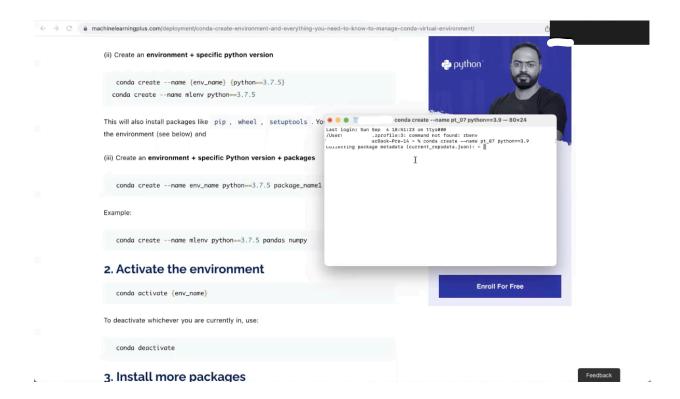
P5 TRANSCRIPT - PYTORCH

00:05

Okay, so the first thing as I'm installing Python The first thing I would do probably installing it via conda Anaconda and I'm in order to do that and create a new environment because I don't want to contaminate the other environment I need to create a new one. Goes to google and search for "anaconda create a new environment" clicks on the second link (which is not the official page)



So probably something like this, just randomly specify the name whatever I just randomly name it and actually for now I don't know what the usage of it so I don't I just specify the latest not less it's like the most well mostly used Python version like triple nine and stuff.



Observer: Is this the official page?

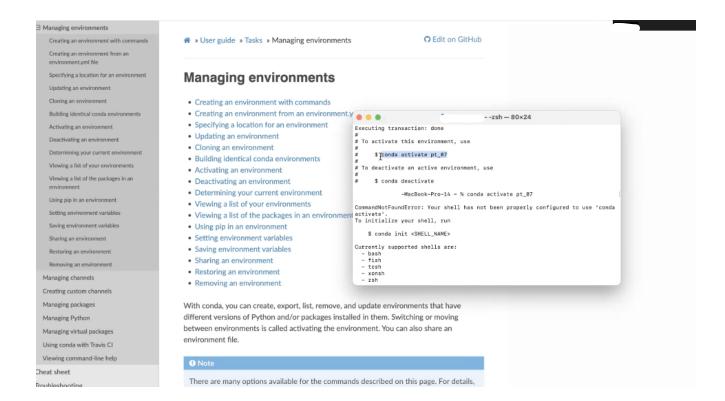
No, it was just like some random link Yeah.

01:55

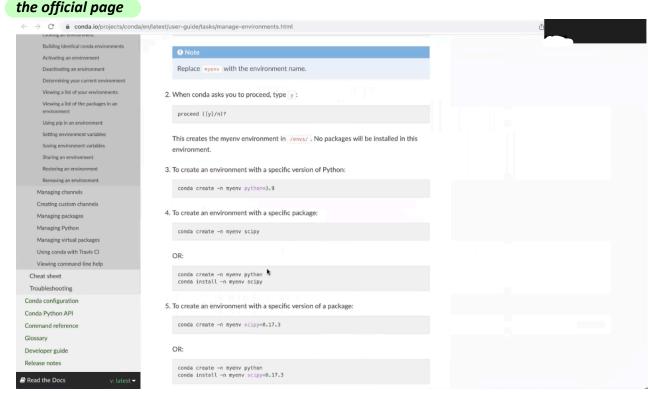
Actually I usually found in the room very a lot like the official and some like like the like Stack Overflow and stuff yeah no problem what happens now this is listening Anaconda Yeah, it's working I just thought it wasn't he thought it was not working because nothing was happening on the terminal, the terminal was processing the command but it was taking too long.

03:24

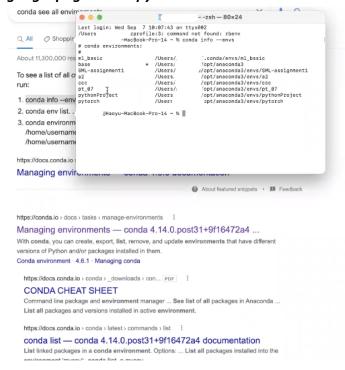
now I'm just creating a new environment virtual environment so that I can install all the packages there instead of on itself just install everything in my base environment or other stuff I just want to separate between different projects and then what I need to do is to enter the environment. It's really funny this time, I usually...*reading instructions on the terminal*



Actually there is something wrong here. I have no idea because normally it will just showcase where the environment I am and front in the processes but I didn't see it this time *looking for information on*



Goes to google again and searches for "conda see all environments" Finds the information on the google page and copy the commands on the terminal



Actually even say that I have it already. This is the environment, I want to enter it right now. It's like maybe probably because the other day I was, because the Anaconda is only running on the Intel chip. And I'm using the M1 and a chem if not less efficient. And the other day I was trying to install TensorFlow, which some documents suggested I installed another conda package management tool stuff. Installed that which is not Anaconda is something called a "mini Ford", or stuff like that. And I installed that but I found probably stopped working. So I deleted so maybe that will be the reason why. So probably what I will do is to...

06:31

Observer: So it's like a version problem?

06:34

Soemthing like that, this is essentially to conda package management tools. And I can't just do something like "conda activate" this one, just navigate between different package management management tools, but they are essentially using the same command. So maybe I maybe I need to specify the whole path. *Keeps reading the instructions on the terminal* No, it's not working. So yeah, it's really weird. I didn't, I didn't run into this problem. Like yesterday, I didn't move on to this problem.

Observer: So you've never faced this problem before?

Never. Yeah. Yeah, actually, you can see this is I'm using this pytorch environment. And normally, when I enable this terminal, there is like pytorch, indicating that I'm currently in this environment. So maybe "conda activate pytorch" it will automatically. Go into that environment, and I can install packages, whatever I want in there. But But I have no idea what is happening.

08:10

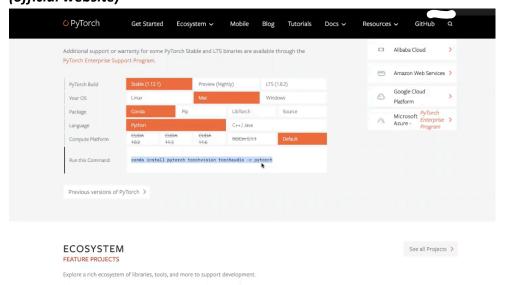
Observer: So it's working when you using the Python environment. But it doesn't work when you do it through the terminal?

08:19

Right. Yeah, this time, precisely speaking is right. But I've never run into this problem before. Maybe I'll just try to...maybe I'll try to find a problem here *types the command "conda activate pt_07" on the terminal and read the message* instead of just installing it... "your shell has not properly configured to use conda." Activate. Initialize. Oh, I didn't even need it. So it actually gives me this.

09:13

Opening your current shell. Okay, now is working. No idea why it is not in it for this short script. But by anyway, he actually provides a really thorough instruction of how to initialize it. So maybe now I'm able to. Yeah, yeah, I'm currently logging in with. So after that, I just want to install everything in this environment. So maybe like, pytorch. *Goes to google and types "pytorch", clicks on the first link* (official website)



Actually, it is really user friendly for the pytorch environment just gave me all the instructions here. Like TensorFlow and stuff. If I have to even give installation instruction is on page. Maybe it is, I'm using the stable, actually the preview one, eight has the GPU version, but I'm not using that stable Mac, I'm probably going to use conda. Because the pip install usually have some compatibility issues. *(reading the website page)* Yeah, just cross all these options on me, I just change the default one. So

10:39

Observer: Have you ever installed Pytortch using another operating system?

10:45

Yeah, sure. I used Windows before actually, doing Windows is also quite easy to install pytorch, I actually, this is one of the reasons why I prefer using this deep learning framework. Not only because it is structures and stuff, but because it is easy, easier to install, like, that the TensorFlow before, the conda install is also quite easier, but it doesn't have this instruction on the homepage. And what makes it really trouble is that if you try to use pip install for the TensorFlow, especially on the GPU version, you have to specify the some CUDA drive Stuff like that. You have to make sure that this TensorFlow version exactly match the CUDA version. exactly match. What Python version of stuff? Actually, I prefer conda. Because I'm actually installing TensorFlow using conda is not that difficult. But when I just began, I studied mathematics in my bachelor's degree with an AI. Honestly speaking, I don't have any programming experience before. And when I just started doing deep learning and stuff. I didn't even know how to tap type shell script and stuff. And TensorFlow, I just, I just know that pip install. And fear there are like a lot, or I saw all the things in the same environment in the basic environment, not not, not just to separate them. In the basic environment, I have to use the pip install to specify a lot of versions to a lot of different software versions to make them compatible. And the CPU, the one that runs on CPU is relatively easier, because you don't have to specify the CUDA, but no one, especially if they wish to debug faster. Locally, they will like to install GPL version but it is just too problematic. And I spent, like over a week, and I didn't succeed, succeed. And then I just asked some friends of mine over a year over a week. Yeah, or I because I was in China. I was in China, you know, there is like some firewalls and stuff I we cannot visit a lot of websites. So yeah, we can't wish mix either TensorFlow installation really, in the spirit is really low. I for example, I installed here maybe just take like 30 seconds or minutes and stuff. But in China, maybe. Yeah, you just install it and you go cook. Cool.

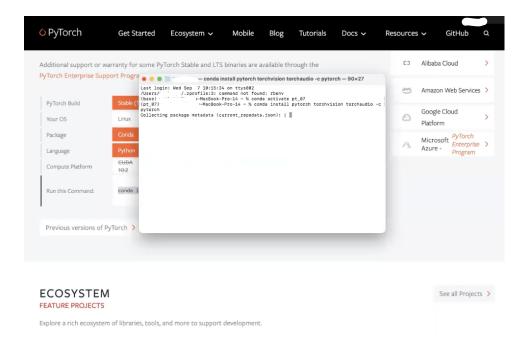
14:14

Yeah, actually, sometimes because the speed is too low. I don't know what's the mechanism, the software you just automatically stop that pipeline, just downloading like 50%. So oh, it fails. And I started all over again. Actually, there there is also a problem for that because you download 50%, it won't just delete those cached files it just stored a locally. Yeah, and at that time, I was using Windows. You know, I was really a freshman in IT and I don't know to how to do it on a D drive or E drive or just

running around the system drive, just after several installation, the Cisco AC drive just there's no storage here there. And as I was really new to that area, I don't know where to find that. The path that I installed that.

15:38

at that time, C drive just for Sorry, I just to restart or re initiate or system. And that was really like a nightmare before I really, really know how to use conda Yeah, and the pytorch I actually believe that believe conda version really makes the installation of TensorFlow easier. But um but because this is running on a one chip which is not compatible to the Intel version, so yeah, that can be a little bit difficult. So yeah, so maybe I know now I just need to copy paste this line



16:35

Yeah, and I can see that it is running Pytorch... I actually I can specify the version pot but the pytorch there is not like the very much variation between each version so I can install the latest like 1.12 and after installing it I believe this is finished and I can just type the Python to check whether I really installing it successfully. This is taking a while...

"What is happening???"

18:33

Yeah, great. So sometimes sometimes even when I want to showcase some error as you say there is an error here and when I present the other okay is importing Oh yeah. So maybe I can just create a tunnel sometimes doing after finishing this step is not enough I have to just like do it create a tensor and stuff because the other day I... just the other day, because I had no idea. The pytorch is based development divided based on C++ and stuff, I believe. Yeah. And he says I have like multiple GCC running system and just crashes the whole system maybe just like specifier. Great got confused between NumPy and pytorch? And okay, let's see. Yeah. So, it actually works perfectly. Yeah. So basically, at this step, I am sure that Pytorch is intalled. Yeah.

20:23

Observer: Did you have any challenges during the selection process?

20:52

Actually, yes. Because the first you can see that for some reason I cannot, just after creating the virtual environment on conda, I can just navigate through it, or some reason I have no idea what happens. But actually there is just instructions showing on the shell script. I don't even have to search for any information online. It just gave me everything.

21:21

Observer: You didn't have to go to Google and search for something because...

21:27

Yeah, only the prompt instructions

21:36

Yeah. Um, the other part, probably, is there is no nothing. Actually, I didn't find anything quite difficult during the installation part. But actually, when really in a software development process, probably I have to specify some versions between different packages like, this time, this time I was installing this pytorch. And sometimes, for example, I need to use transformers are hugging phase, I download hugging phase that I have to find the specific pytorch based hugging face. No, that is a blue one. And sometimes, like the one that I did, recently, I use a pytorch pin(?) search, which is some package that was developed by other people and I, and that actually requires me to install a certain version of pytorch. So maybe this version alignment is, is something that maybe worth a little bit of time to figure out, but not that difficult, but it's actually something that will happen in real life.

Observer: What did you do to overcome the challenges?

23:18

yeah, actually, the only challenge that I'm adding is just to just to read the instructions follow it. And most of the time, it actually works. The most of the errors, most of the packages, stuff able to complete prompts, right, right on the screen. And that will be that will be the right situation in most cases. I know there are situations where there the prompt me information is actually not the one. Yeah, is not the real problem is but yeah, I barely run into that situation very