

Win11安装Pytorch实践

本机环境



pytorch安装

进入pytorch官网下载页面：<https://pytorch.org/get-started/locally/#start-locally>

安装之前的版本进入网页：<https://pytorch.org/get-started/previous-versions/>

之前看过某篇博客说安装cuda低版本的torch的也是可以的。还有一种方式下载wheel, https://download.pytorch.org/whl/torch_stable.html。

1. 命令行（一般得用科学的方式才能下载成功）：

```
pip3 install torch torchvision torchaudio --extra-index-url https://download.pytorch.org/whl/cu116
```

Shortcuts

Prerequisites

Supported Windows Distributions

Python

Package Manager

Installation

Anaconda

pip

Verification

Building from source

Prerequisites

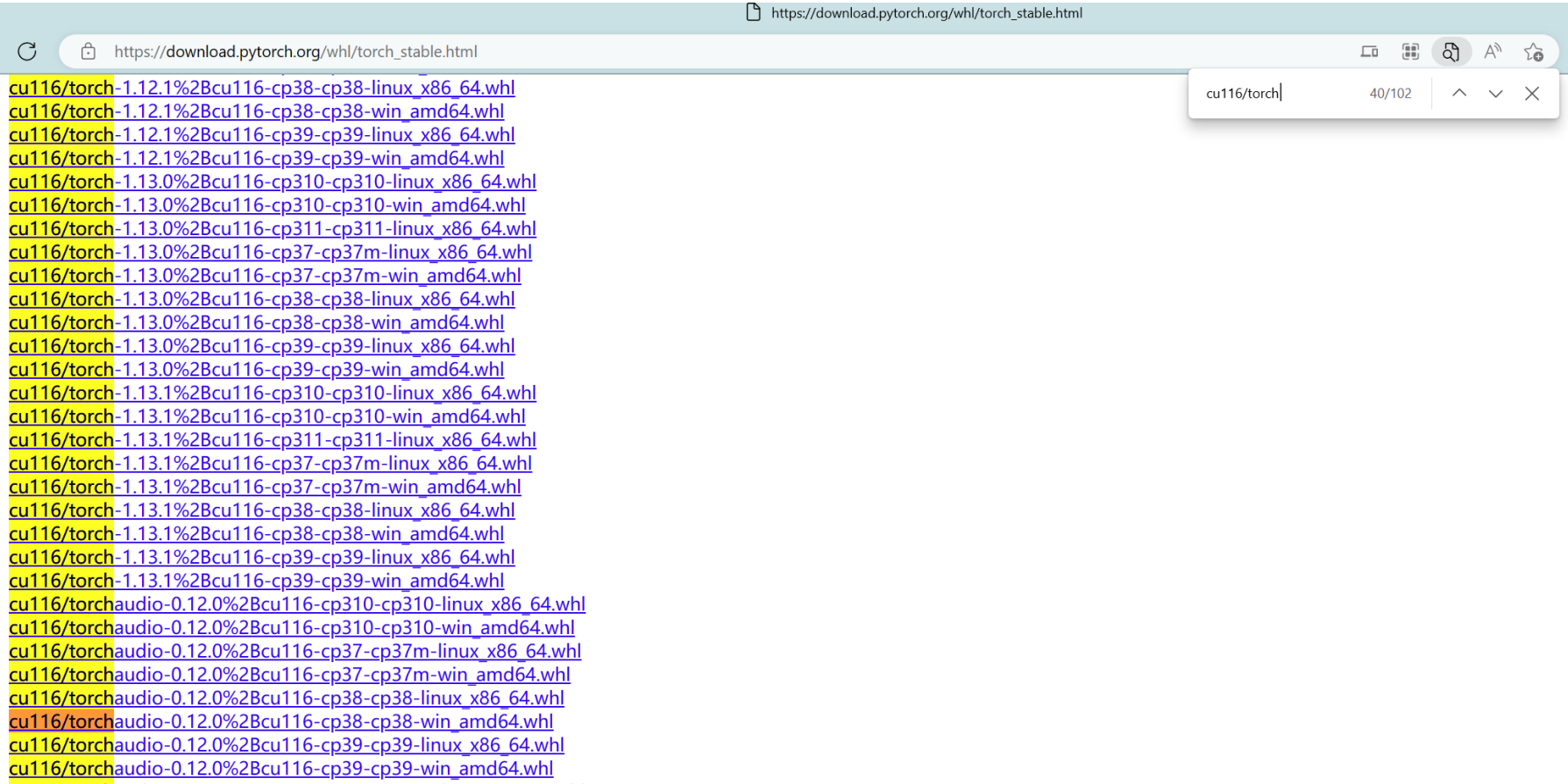
START LOCALLY

Select your preferences and run the install command. Stable represents the most currently tested and supported version of PyTorch. This should be suitable for many users. Preview is available if you want the latest, not fully tested and supported, builds that are generated nightly. Please ensure that you have **met the prerequisites below (e.g., numpy)**, depending on your package manager. Anaconda is our recommended package manager since it installs all dependencies. You can also [install previous versions of PyTorch](#). Note that LibTorch is only available for C++.

| | | | | |
|-------------------|--|-----------|-------------------|--------|
| PyTorch Build | Stable (1.13.1) | | Preview (Nightly) | |
| Your OS | Linux | Mac | Windows | |
| Package | Conda | Pip | LibTorch | Source |
| Language | Python | | C++ / Java | |
| Compute Platform | CUDA 11.6 | CUDA 11.7 | ROCm 5.2 | CPU |
| Run this Command: | pip3 install torch torchvision torchaudio --extra-index-url https://download.pytorch.org/whl/cu116 | | | |

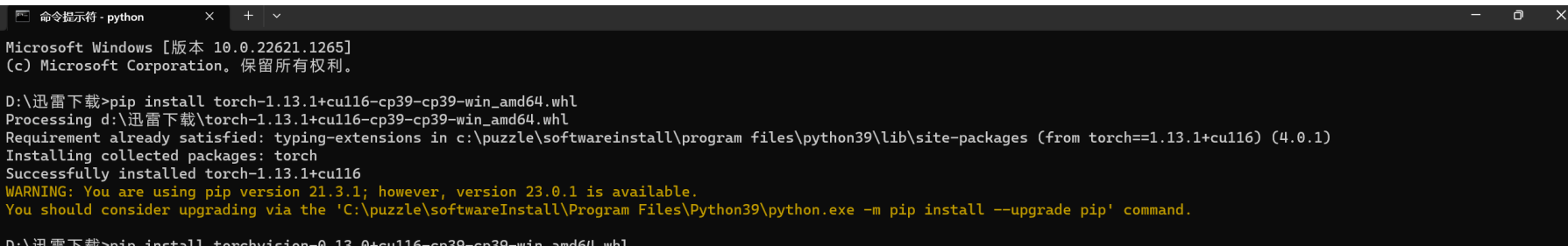
NOTE: PyTorch LTS has been deprecated. For more information, see [this blog](#).

2. wheel下载方式：https://download.pytorch.org/whl/torch_stable.html。



找到下载链接，复制到迅雷里下载，防止浏览器下载断了不容易断点恢复下载。

```
pip install torch-1.13.1+cu116-cp39-cp39-win_amd64.whl
pip install torchvision-0.14.1+cu116-cp39-cp39-win_amd64.whl
pip install torchaudio-0.13.1+cu116-cp39-cp39-win_amd64.whl
```



```
命令提示符 - python
D:\迅雷下载>pip install torchvision-0.13.0+cu116-cp39-cp39-win_amd64.whl
Processing d:\迅雷下载\torchvision-0.13.0+cu116-cp39-cp39-win_amd64.whl
Requirement already satisfied: typing-extensions in c:\puzzle\softwareinstall\program files\python39\lib\site-packages (from torchvision==0.13.0+cu116) (4.0.1)
Requirement already satisfied: pillow!=8.3.*,>=5.3.0 in c:\puzzle\softwareinstall\program files\python39\lib\site-packages (from torchvision==0.13.0+cu116) (8.4.0)
Requirement already satisfied: requests in c:\puzzle\softwareinstall\program files\python39\lib\site-packages (from torchvision==0.13.0+cu116) (2.26.0)
Requirement already satisfied: numpy in c:\puzzle\softwareinstall\program files\python39\lib\site-packages (from torchvision==0.13.0+cu116) (1.21.5)
Collecting torch==1.12.0
  Downloading torch-1.12.0-cp39-cp39-win_amd64.whl (161.8 MB)
    | 317 kB 6.8 kB/s eta 6:34:22
ERROR: Operation cancelled by user
WARNING: You are using pip version 21.3.1; however, version 23.0.1 is available.
You should consider upgrading via the 'C:\puzzle\softwareinstall\Program Files\Python39\python.exe -m pip install --upgrade pip' command.

D:\迅雷下载>pip install torchvision-0.13.0+cu116-cp39-cp39-win_amd64.whl

D:\迅雷下载>pip install torchvision-0.14.1+cu116-cp39-cp39-win_amd64.whl
Processing d:\迅雷下载\torchvision-0.14.1+cu116-cp39-cp39-win_amd64.whl
Requirement already satisfied: torch==1.13.1 in c:\puzzle\softwareinstall\program files\python39\lib\site-packages (from torchvision==0.14.1+cu116) (1.13.1+cu116)
Requirement already satisfied: requests in c:\puzzle\softwareinstall\program files\python39\lib\site-packages (from torchvision==0.14.1+cu116) (2.26.0)
Requirement already satisfied: typing-extensions in c:\puzzle\softwareinstall\program files\python39\lib\site-packages (from torchvision==0.14.1+cu116) (4.0.1)
Requirement already satisfied: numpy in c:\puzzle\softwareinstall\program files\python39\lib\site-packages (from torchvision==0.14.1+cu116) (1.21.5)
Requirement already satisfied: pillow!=8.3.*,>=5.3.0 in c:\puzzle\softwareinstall\program files\python39\lib\site-packages (from torchvision==0.14.1+cu116) (8.4.0)
Requirement already satisfied: certifi>=2017.4.17 in c:\puzzle\softwareinstall\program files\python39\lib\site-packages (from requests->torchvision==0.14.1+cu116) (2021.10.8)
Requirement already satisfied: charset-normalizer~=2.0.0 in c:\puzzle\softwareinstall\program files\python39\lib\site-packages (from requests->torchvision==0.14.1+cu116) (2.0.9)
Requirement already satisfied: urllib3<1.27,>=1.21.1 in c:\puzzle\softwareinstall\program files\python39\lib\site-packages (from requests->torchvision==0.14.1+cu116) (1.26.7)
Requirement already satisfied: idna<4,>=2.5 in c:\puzzle\softwareinstall\program files\python39\lib\site-packages (from requests->torchvision==0.14.1+cu116) (3.3)
Installing collected packages: torchvision
Successfully installed torchvision-0.14.1+cu116
WARNING: You are using pip version 21.3.1; however, version 23.0.1 is available.
You should consider upgrading via the 'C:\puzzle\softwareinstall\Program Files\Python39\python.exe -m pip install --upgrade pip' command.

D:\迅雷下载>pip install torchaudio-0.13.1+cu116-cp39-cp39-win_amd64.whl
Processing d:\迅雷下载\torchaudio-0.13.1+cu116-cp39-cp39-win_amd64.whl
Requirement already satisfied: torch==1.13.1 in c:\puzzle\softwareinstall\program files\python39\lib\site-packages (from torchaudio==0.13.1+cu116) (1.13.1+cu116)
Requirement already satisfied: typing-extensions in c:\puzzle\softwareinstall\program files\python39\lib\site-packages (from torch==1.13.1->torchaudio==0.13.1+cu116) (4.0.1)
Installing collected packages: torchaudio
Successfully installed torchaudio-0.13.1+cu116
WARNING: You are using pip version 21.3.1; however, version 23.0.1 is available.
You should consider upgrading via the 'C:\puzzle\softwareinstall\Program Files\Python39\python.exe -m pip install --upgrade pip' command.

D:\迅雷下载>python
Python 3.9.9 (tags/v3.9.9:ccb0e6a, Nov 15 2021, 18:08:50) [MSC v.1929 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license" for more information.
>>> import torch
>>>
>>> print(torch.cuda.is_available())
True
>>> |
```

cuda安装，迅雷下载

[CUDA Toolkit 11.6 Update 2 Downloads | NVIDIA Developer](#)

https://developer.download.nvidia.com/compute/cuda/11.6.2/local_installers/cuda_11.6.2_511.65_windows.exe

Select Target Platform

Click on the green buttons that describe your target platform. Only supported platforms will be shown. By downloading and using the software, you agree to fully comply with the terms and conditions of the **CUDA EULA**.

| | | | | | |
|------------------|-------------|---------------|-------------|-------------|-------------|
| Operating System | Linux | Windows | | | |
| Architecture | x86_64 | | | | |
| Version | 10 | 11 | Server 2016 | Server 2019 | Server 2022 |
| Installer Type | exe (local) | exe (network) | | | |

Download Installer for Windows 11 x86_64

The base installer is available for download below.

| | |
|--|---------------------|
| ➤Base Installer | Download (2.5 GB) ⬇ |
| Installation Instructions: | |
| <ol style="list-style-type: none">Double click cuda_11.6.2_511.65_windows.exeFollow on-screen prompts | |

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[cuDNN Download | NVIDIA Developer](#)

<https://developer.nvidia.com/rdp/cudnn-archive>

Home

cuDNN Archive

NVIDIA cuDNN is a GPU-accelerated library of primitives for deep neural networks.

| |
|--|
| Download cuDNN v8.7.0 (November 28th, 2022), for CUDA 11.x |
| Download cuDNN v8.7.0 (November 28th, 2022), for CUDA 10.2 |
| Download cuDNN v8.6.0 (October 3rd, 2022), for CUDA 11.x |
| Download cuDNN v8.6.0 (October 3rd, 2022), for CUDA 10.2 |
| Download cuDNN v8.5.0 (August 8th, 2022), for CUDA 11.x |
| Download cuDNN v8.5.0 (August 8th, 2022), for CUDA 10.2 |
| Download cuDNN v8.4.1 (May 27th, 2022), for CUDA 11.x |
| Download cuDNN v8.4.1 (May 27th, 2022), for CUDA 10.2 |
| Download cuDNN v8.4.0 (April 1st, 2022), for CUDA 11.x |

参考

<https://blog.csdn.net/aiboom/article/details/120577678> cudnn复制到cuda里，看cuda的环境变量，没有自己添加，我的发现已经有了

https://blog.csdn.net/Mind_programmonkey/article/details/99688839 看cuda安装过程，哪些安装哪些不安装，这个自己搜搜也行，当前有的就不要用低版本覆盖，没有就可以选

https://blog.csdn.net/qq_46126258/article/details/112708781 这个提供了迅雷下载的思路

----不要看下面这个-----

使用清华源命令行安装的有这个问题，不过已经卸载了，这种方式不行。

https://blog.csdn.net/qq_46941656/article/details/119701547