

Pasos para LIBTORCH en Windows con CUDA

- Tener instalado el driver de NVIDIA
- Bajarse la librería Pytorch

The screenshot shows the PyTorch website's LibTorch download page. The browser address bar shows 'pytorch.org'. The navigation bar includes links for 'Get Started', 'Ecosystem', 'Mobile', 'Blog', 'Tutorials', and 'Docs'. The main content area explains prerequisites and provides a table for selecting the correct download link based on OS, package manager, language, and compute platform.

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 (2.0.1)		Preview (Nightly)	
Your OS	Linux	Mac	Windows	
Package	Conda	Pip	LibTorch	Source
Language	Python		C++ / Java	
Compute Platform	CUDA 11.7	CUDA 11.8	ROCm 5.4.2	CPU

Run this Command:

Download here (Release version):
<https://download.pytorch.org/libtorch/cu117/libtorch-win-shared-with-deps-2.0.1%2Bcu117.zip>

Download here (Debug version):
<https://download.pytorch.org/libtorch/cu117/libtorch-win-shared-with-deps-debug-2.0.1%2Bcu117.zip>

Elegir la versión Release

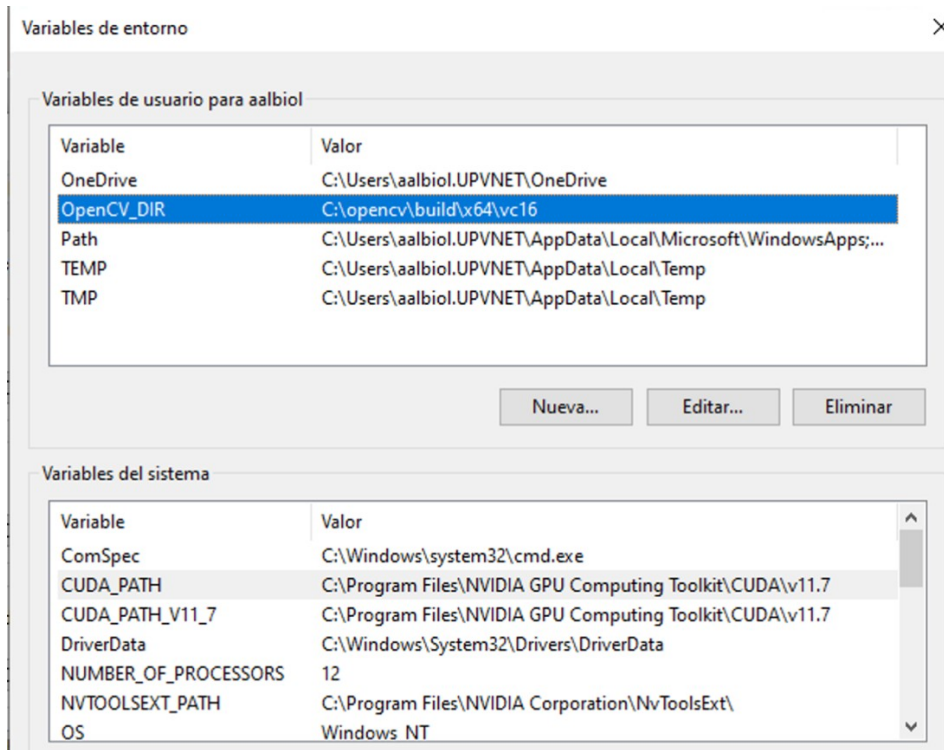
- Bajarse CUDA de la misma versión que indica Pytorch
- Bajarse OpenCV standar para Windows
- NO es necesario cudnn

Variables de entorno a considerar:

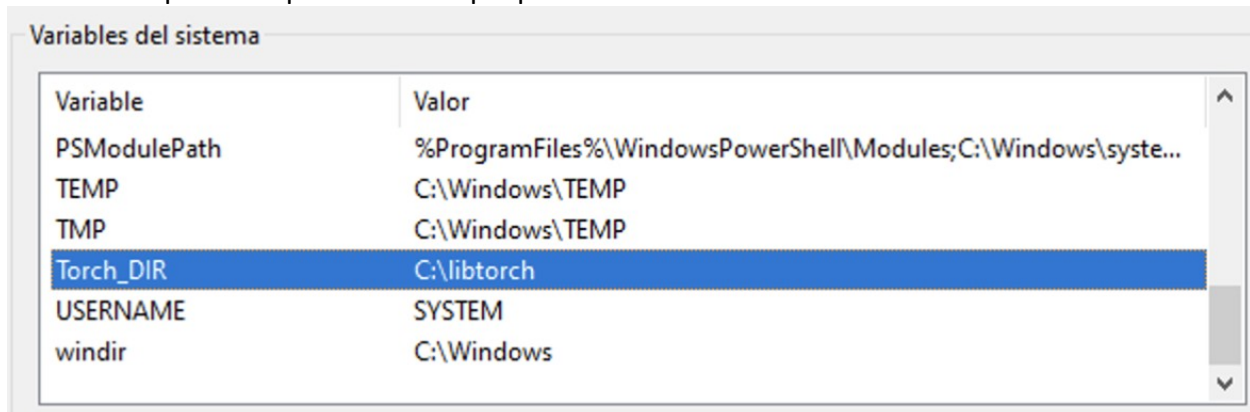
- PATH de Usuario

%USERPROFILE%\AppData\Local\Microsoft\WindowsApps
%USERPROFILE%\dotnet\tools
C:\opencv\build\x64\vc16\bin
C:\libtorch\lib

- Variables para encontrar CUDA, OPENCV y Libtorch
- Las de CUDA se crean al instalarlo:

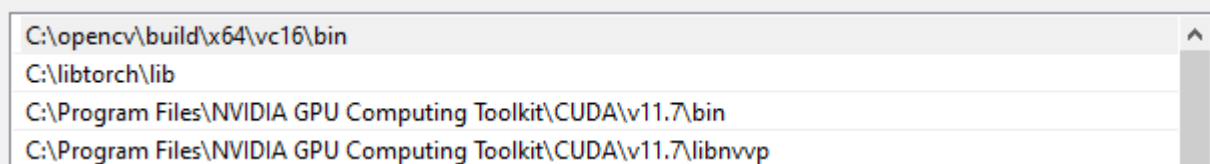


La de Torch para compilar se tiene que poner a mano:



Variable PATH del Sistema para que encuentre DLLs:

(las de NVIDIA creo que se ponen al instalar. Torch y OpenCV hay que añadirlas a mano)



Resultado de CMAKE

Para crear la solución Para Visual Studio empleo CMAKE

Supongo que se puede crear la solución “a mano” añadiendo todas las rutas de includes y librerías.

La salida del cmake es:

Selecting Windows SDK version 10.0.22000.0 to target Windows 10.0.19045.

Caffe2: CUDA detected: 11.7

Caffe2: CUDA nvcc is: C:/Program Files/NVIDIA GPU Computing

Toolkit/CUDA/v11.7/bin/nvcc.exe

Caffe2: CUDA toolkit directory: C:/Program Files/NVIDIA GPU Computing Toolkit/CUDA/v12.1/

Caffe2: Header version is: 11.7

No se encontró Python; ejecuta sin argumentos para instalar desde Microsoft Store o deshabilita este acceso directo en Configuración > Administrar alias de ejecución de la aplicación.

CMake Warning at C:/libtorch/share/cmake/Caffe2/public/cuda.cmake:166 (message):

Failed to compute shorthash for libnVRTC.so

Call Stack (most recent call first):

C:/libtorch/share/cmake/Caffe2/Caffe2Config.cmake:88 (include)

C:/libtorch/share/cmake/Torch/TorchConfig.cmake:68 (find_package)

CMakeLists.txt:42 (find_package)

USE_CUDNN is set to 0. Compiling without cuDNN support

Autodetected CUDA architecture(s): 8.6

Added CUDA NVCC flags for: -gencode;arch=compute_86,code=sm_86

TORCH_LIBRARIES torchtorch_libraryC:/libtorch/lib/c10.libC:/libtorch/lib/kineto.libC:\Program Files\NVIDIA Corporation\NvToolsExt\lib\x64\nvToolsExt64_1.libC:/Program Files/NVIDIA GPU Computing Toolkit/CUDA/v11.7/lib/x64/cudart_static.libC:/libtorch/lib/caffe2_nvrtc.libC:/libtorch/lib/c10_cuda.lib

TORCH_INCLUDE_DIRS C:/libtorch/includeC:/libtorch/include/torch/csrc/api/includeC:\Program Files\NVIDIA Corporation\NvToolsExt\include

TORCH_CXX_FLAGS

Configuring done (3.8s)

Generating done (0.1s)

El Warning que he resaltado en rojo se puede ignorar

Visual Studio

- Probado con Visual Studio 2022 y 2017
- Recordar Poner Modo Release
- Recordar poner x64