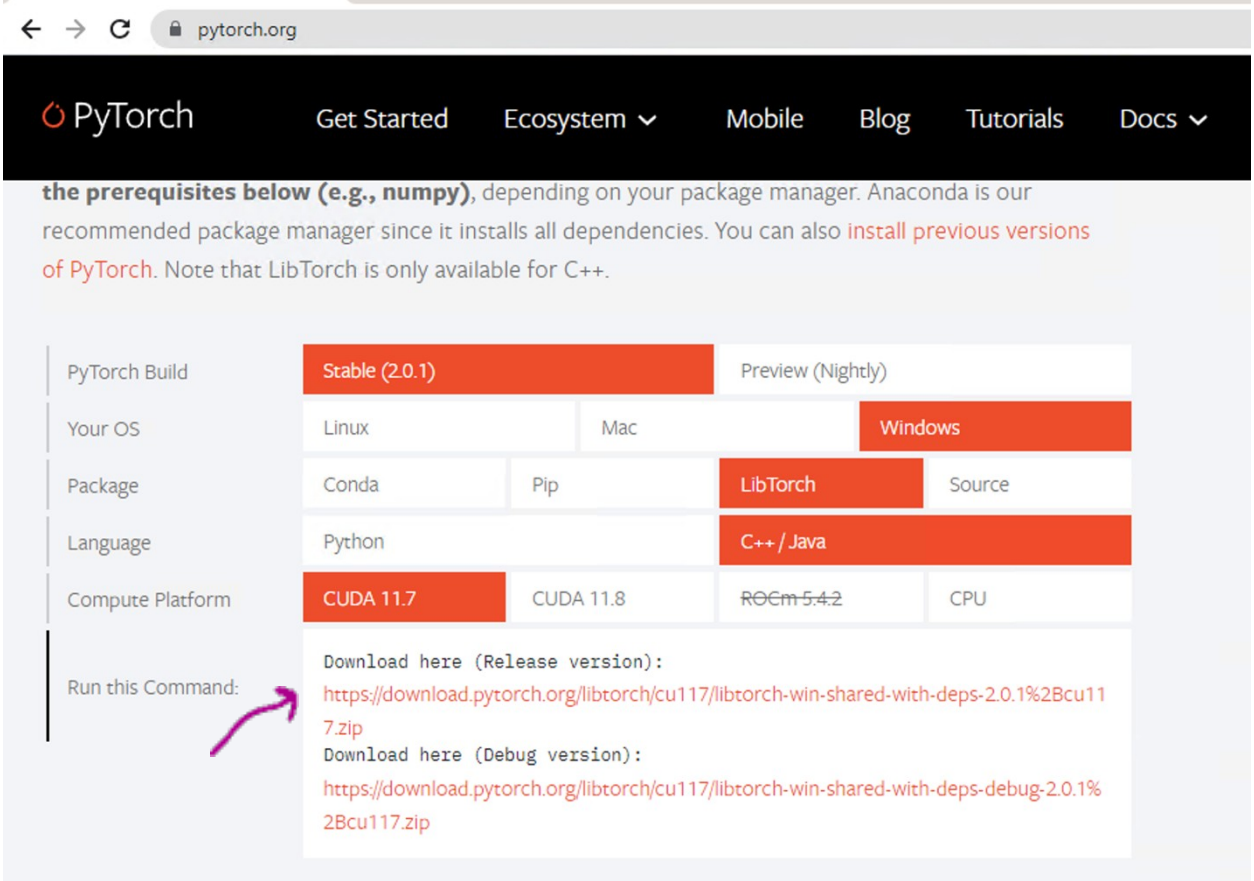
Pasos para LIBTORCH en Windows con CUDA

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

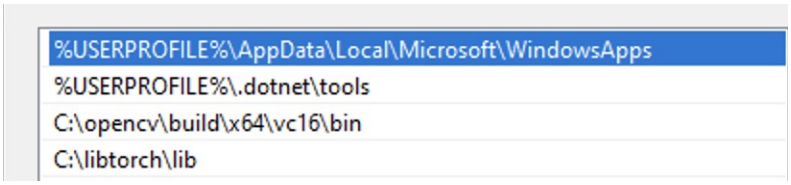


Elegir la versión Release

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

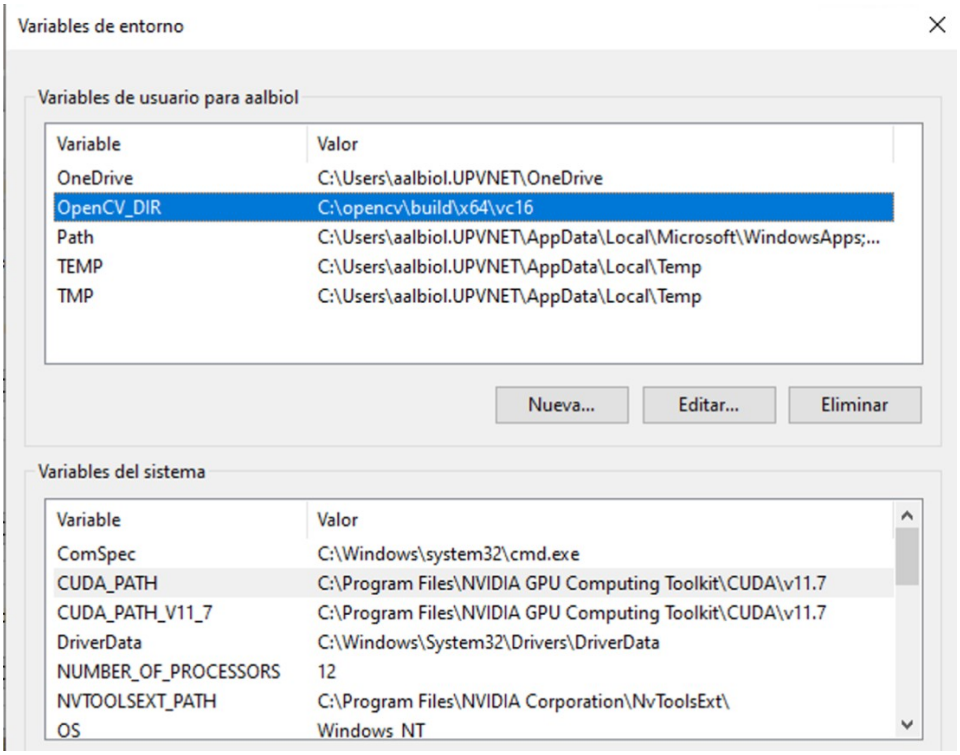
Variables de entorno a considerar:

- PATH de Usuario

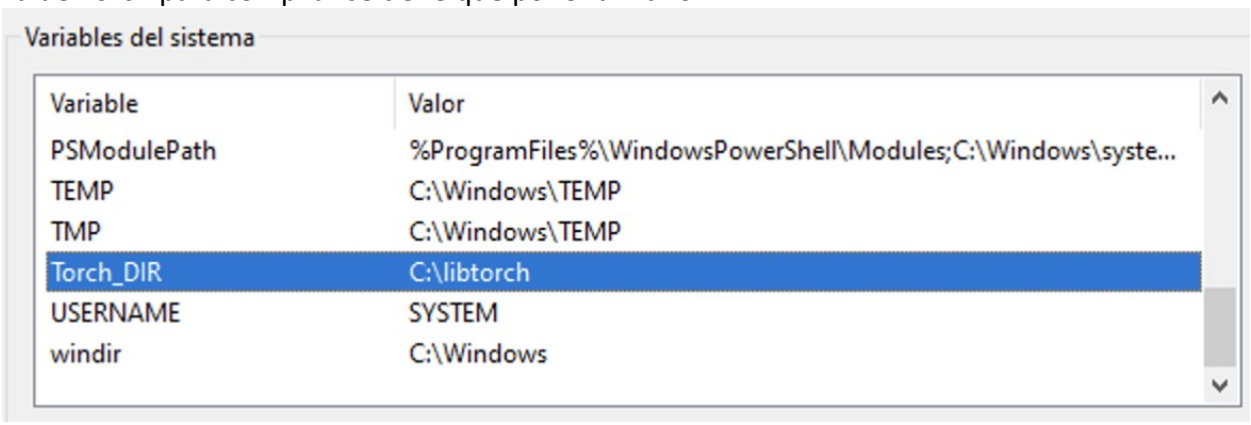


- Variables para encontrar CUDA, OPENCV y Libtorch

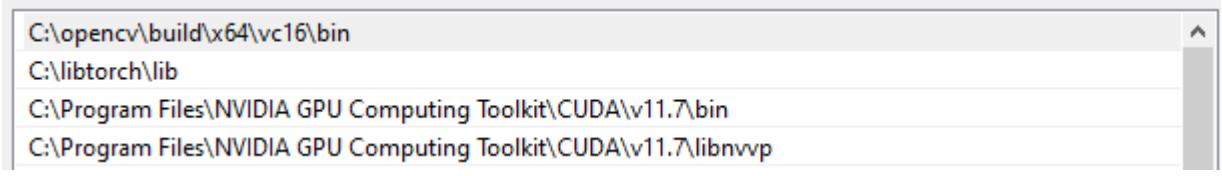
Las de CUDA se crean al instalarlo:



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 Relase
- Recordar poner x64