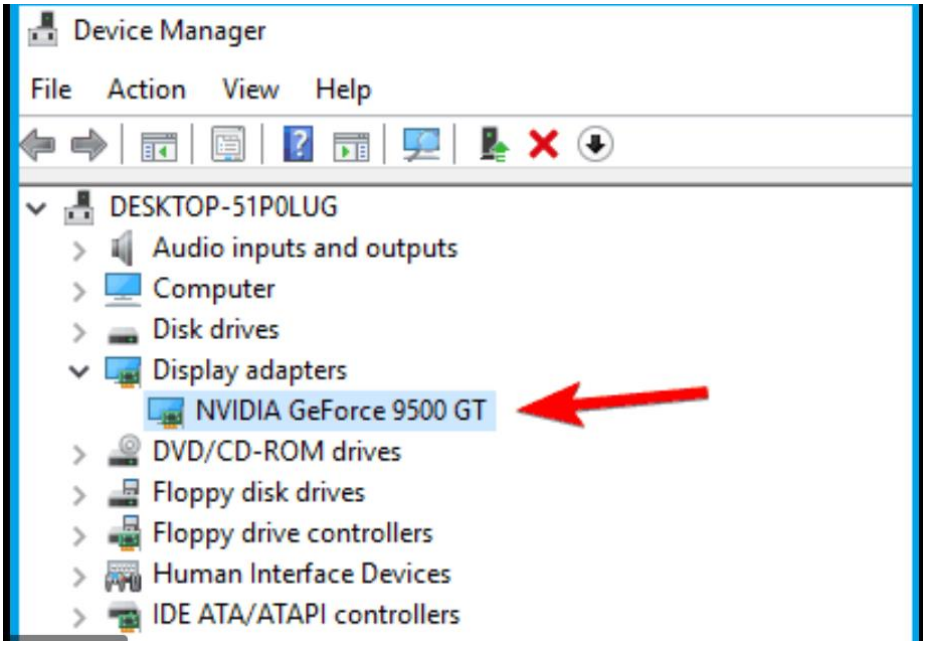
Installing CUDA and cuDNN on Windows

Verify you have a CUDA-Capable GPU:

You can verify that you have a CUDA-capable GPU through the **Display Adapters** section in the **Windows Device Manager**.

- **Open Device Manager.**
- **Check display adapter in Device Manager.**

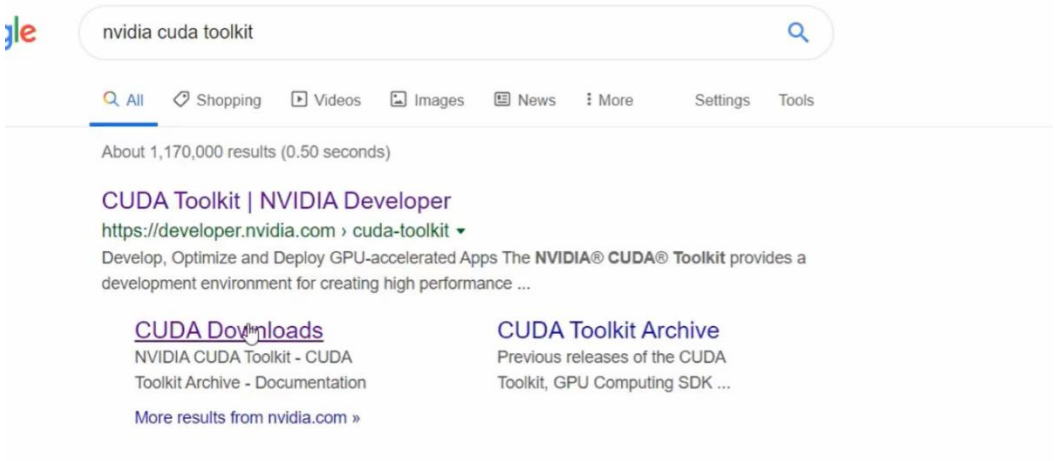


Finding suitable versions

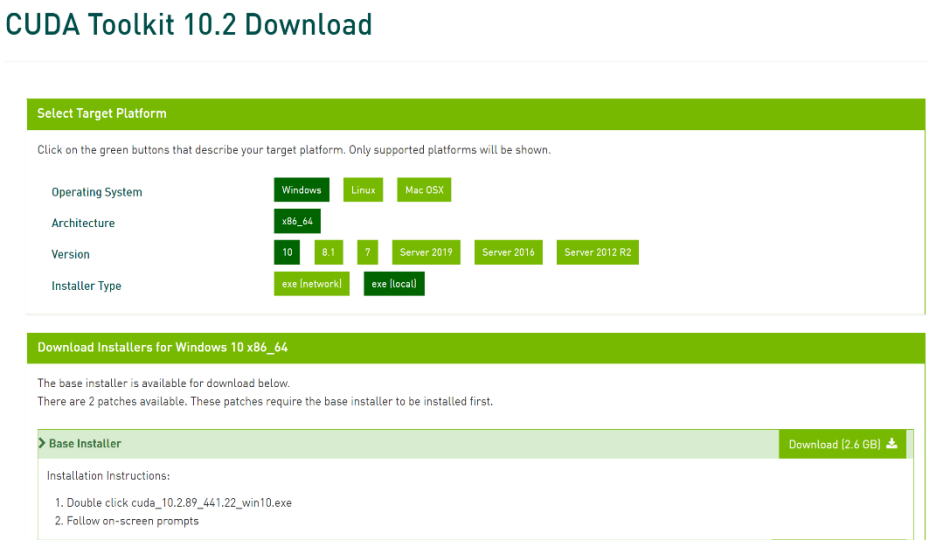
Cuda capable GPUs and their versions can be found here: (https://docs.nvidia.com/cuda/cuda-installation-guide-microsoft-windows/index.html)

Download and install CUDA toolkit:

Download and Follow all default Procedure and after installation check for environment variables

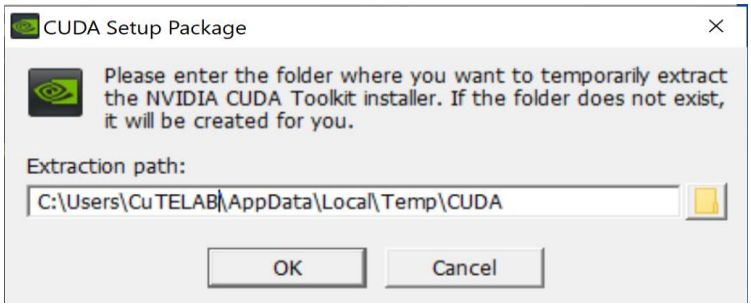


Select the version which is applicable for your system. In our case, we have CUDA 10.2

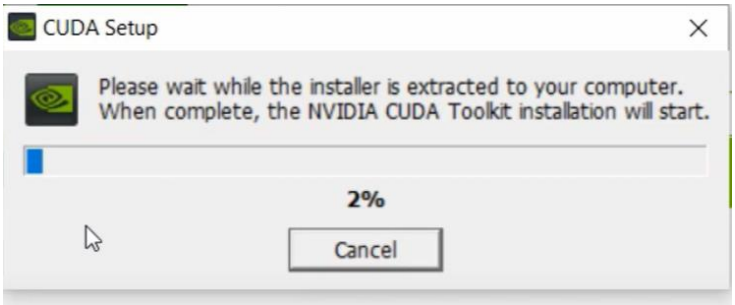


Wait until the file is downloaded, and open it then:

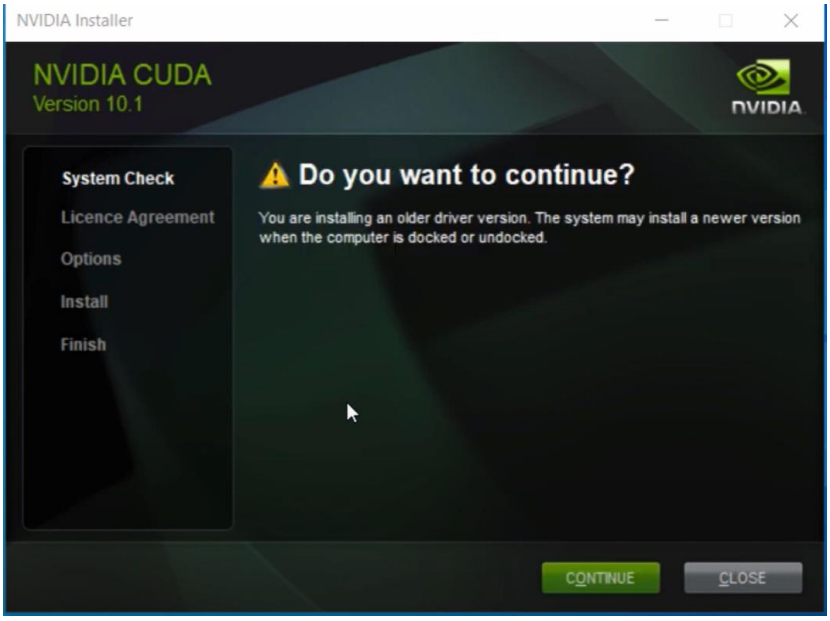
Make sure that your file is installed in C where your program file page is there:



The installation might take sometimes:



Press CONTINUE:



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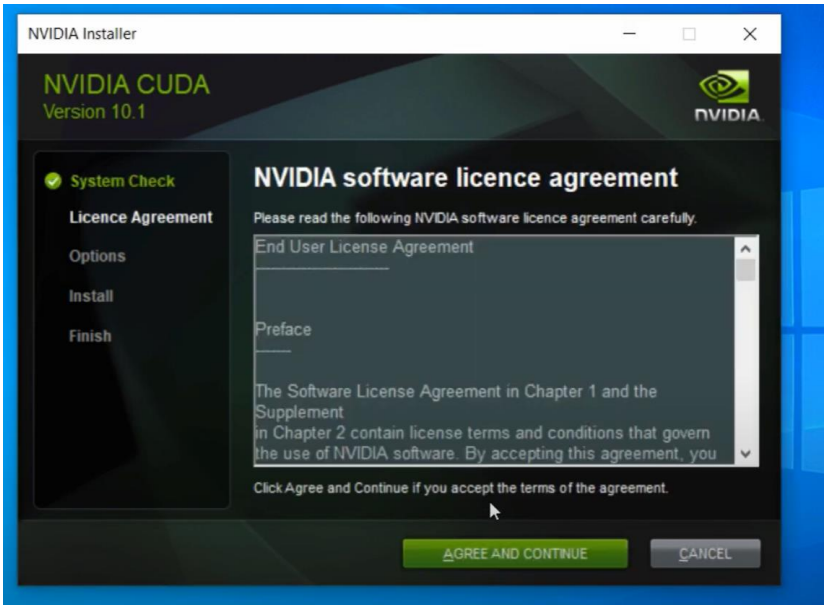
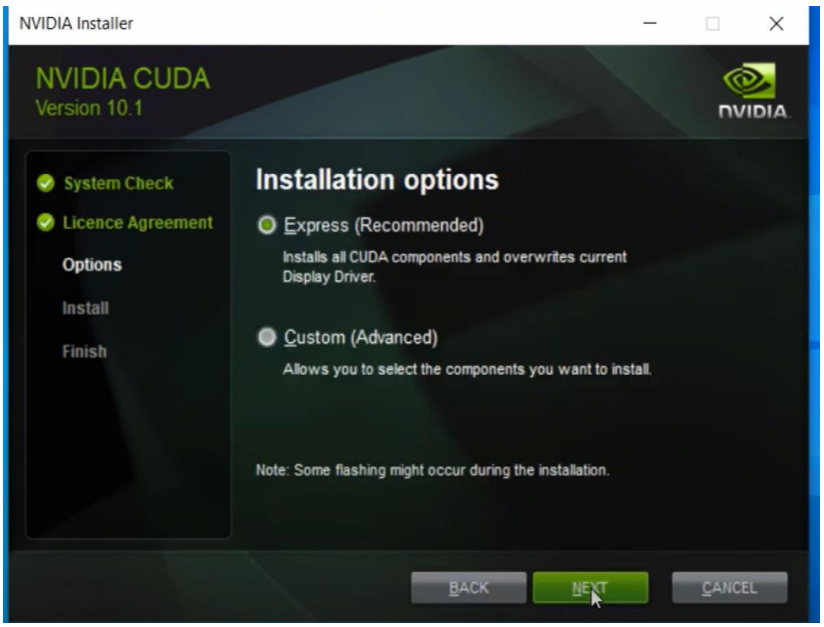
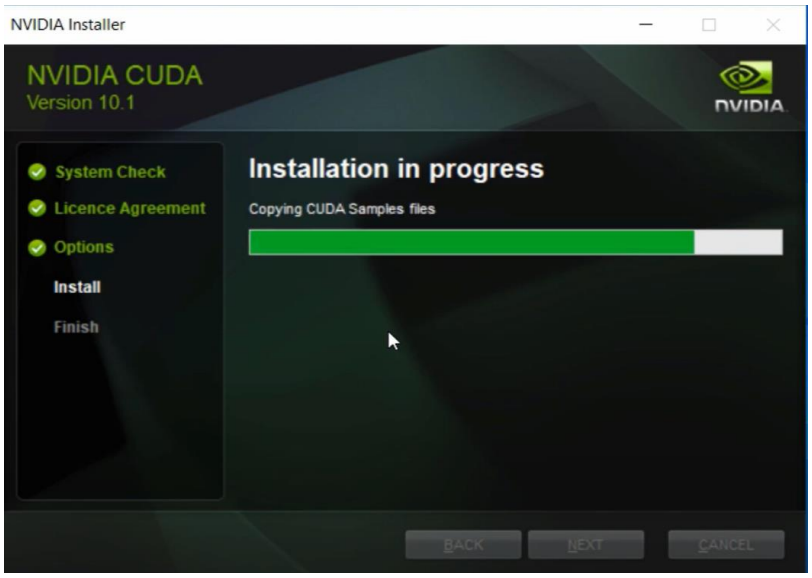
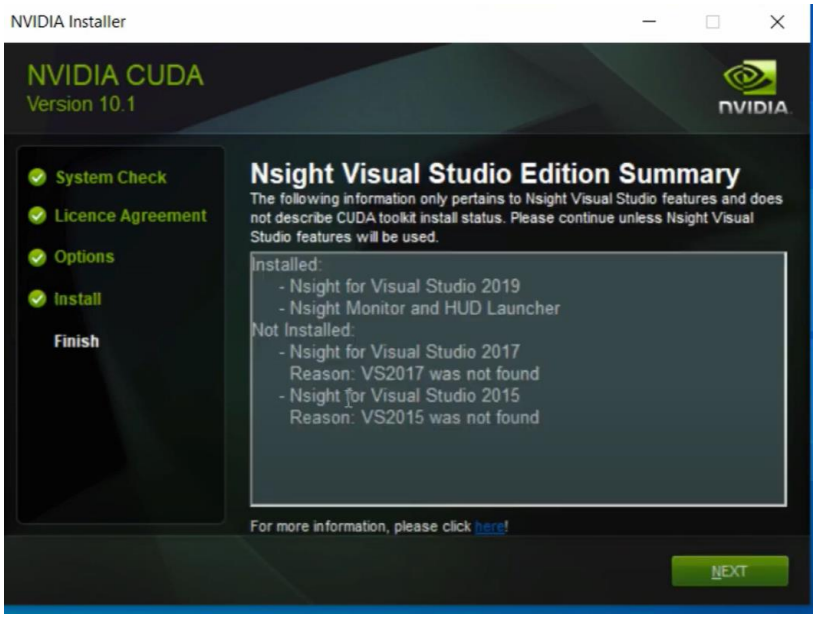
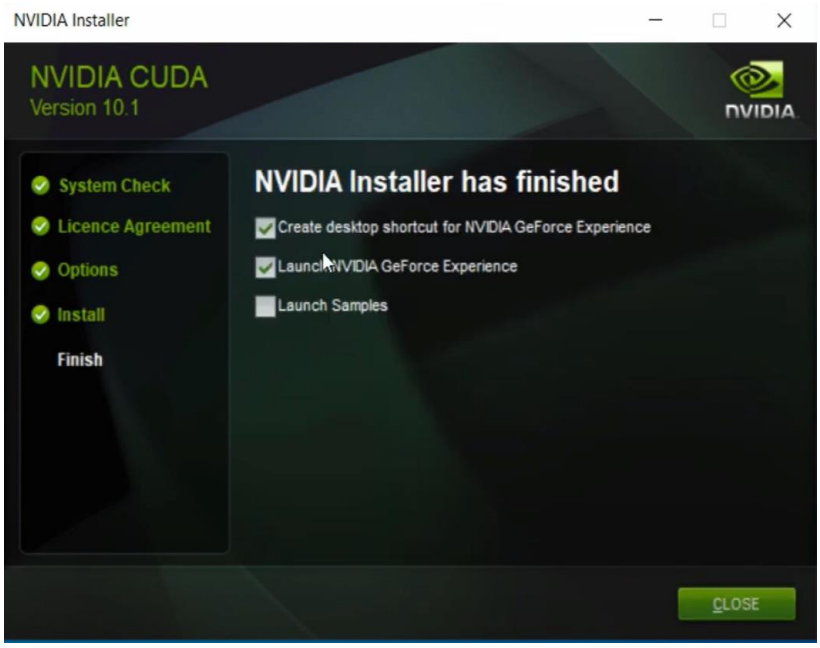


NEXT:



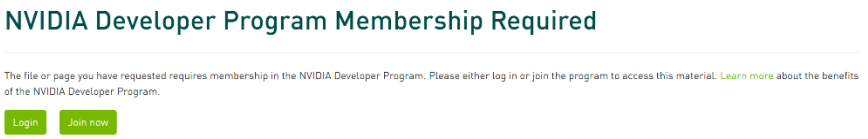

NVIDIA Installer
NVIDIA CUDA
Version 10.1
NVIDIA
System Check
Licence Agreement
Options
Install
Finish
Installation in progress
Copying CUDA Samples files
BACK
NEXT
CANCEL


NVIDIA Installer
NVIDIA CUDA
Version 10.1
NVIDIA
System Check
Licence Agreement
Options
Install
Finish
Nsight Visual Studio Edition Summary
The following information only pertains to Nsight Visual Studio features and does not describe CUDA toolkit install status. Please continue unless Nsight Visual Studio features will be used.
Installed:
- Nsight for Visual Studio 2019
- Nsight Monitor and HUD Launcher
Not Installed:
- Nsight for Visual Studio 2017
Reason: VS2017 was not found
- Nsight for Visual Studio 2015
Reason: VS2015 was not found
For more information, please click here!
NEXT

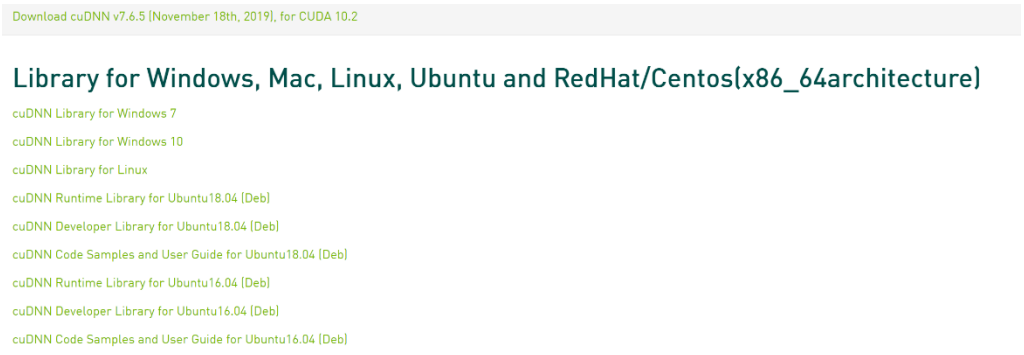

NVIDIA Installer
NVIDIA CUDA
Version 10.1
NVIDIA
System Check
Licence Agreement
Options
Install
Finish
NVIDIA Installer has finished
Create desktop shortcut for NVIDIA GeForce Experience
Launch NVIDIA GeForce Experience
Launch Samples
CLOSE

Download and setup CUDNN:
Go to https://developer.nvidia.com/rdp/cudnn-archive to download the version of CUDNN that is compatible with your CUDA toolkit.

NOTE: You have to be signed in using your Nvidia account to download CUDNN. If you do not have an account, create one.

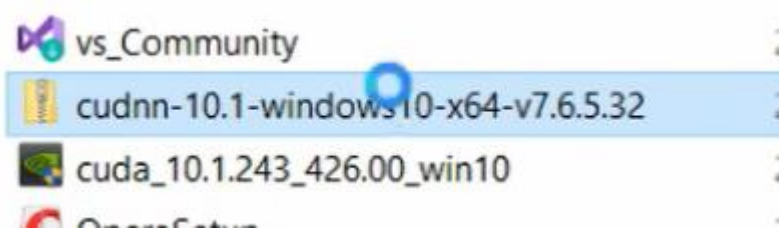


Since we have CUDA 10.2, we will download **cuDNN v7.6.5 for CUDA 10.2**. Then, Click on **cuDNN 7.6.5** and select cuDNN Library for Windows (x86).



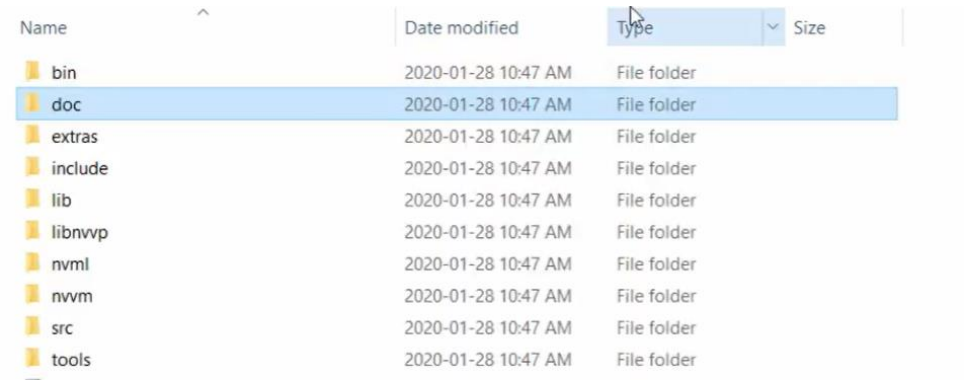
Copy the contents of the cuda folder inside the cuDNN folder to the path where we installed CUDA in step 1 above. (We need the contents of the bin, include & lib folders from cuDNN to be inside the bin, include and lib folders of the CUDA directory).

You need to extract the cuDNN file and open it.

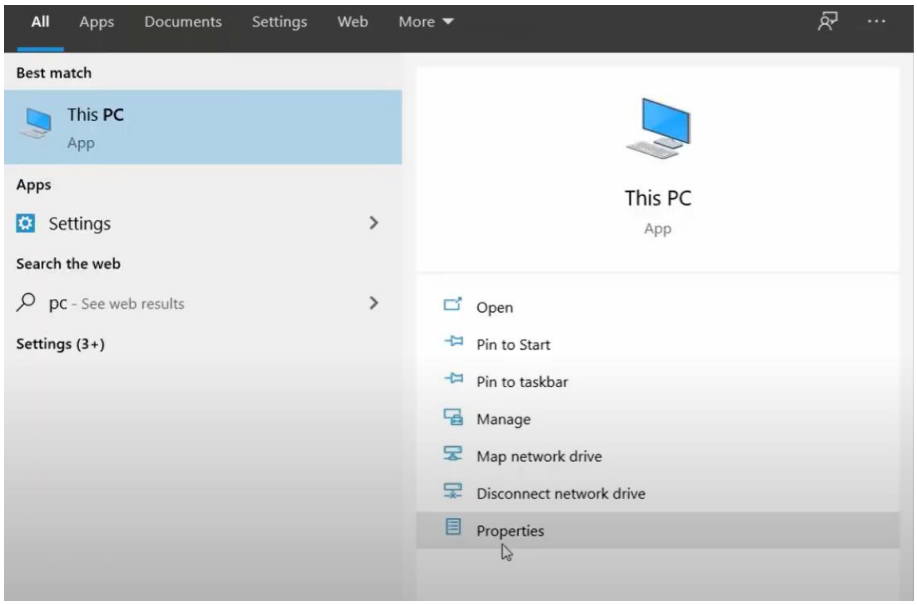


COPY CONTENTS FROM THIS FOLDER :

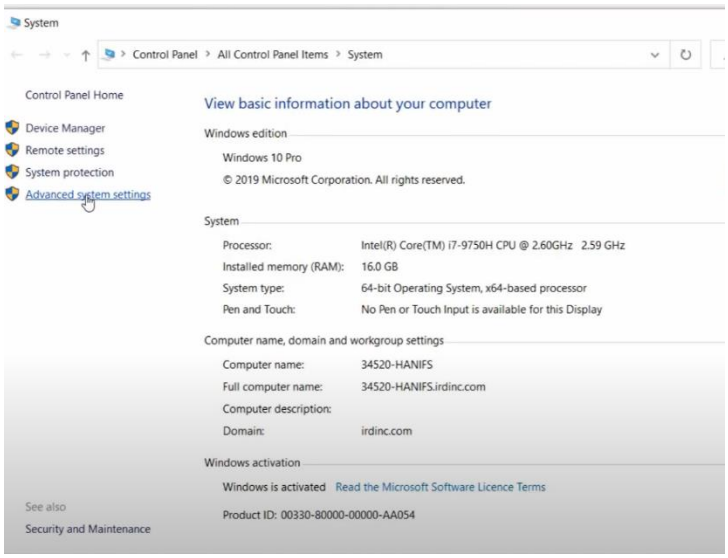
TO THIS FOLDER
Program Files >> NVIDIA GPU COMPUTING TOOLKIT >> CUDA then v10.2



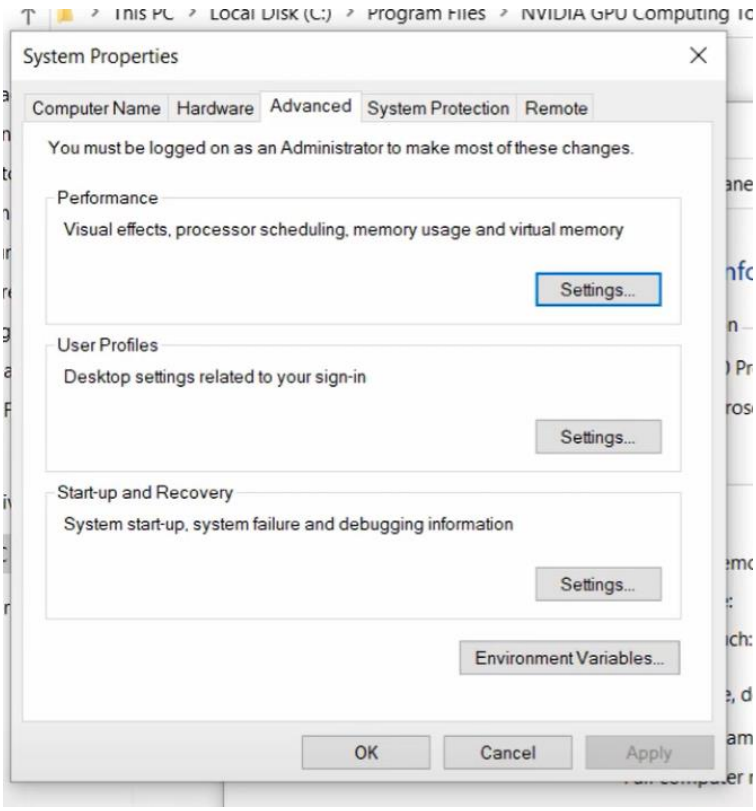
To make sure that you have made everything well, got to **Pc properties:**



Then, advanced system settings



After that, Environment Variables



That’s it. We have successfully set up CUDA and cuDNN on our Windows System.