## WSL-VPNKIT Installation

Link: <https://github.com/sakai135/wsl-vpnkit>

Download the \*.tar.gz file from latest release.

* <https://github.com/sakai135/wsl-vpnkit/releases>
* Move the download file to your USERPROFILE Directory (C:Users/{username} )

In PowerShell Execute the following command:

* wsl --import wsl-vpnkit --version 2 $env:USERPROFILE\wsl-vpnkit wsl-vpnkit.tar.gz

Next In PowerShell, execute the following command to start wsl-vpnkit

* wsl.exe -d wsl-vpnkit --cd /app wsl-vpnkit

To ensure wsl-vpnkit is running, try:

* wsl -l -v



\*\* wsl may not be fun automatically every time when ever you start the computer. So you have to Setup ***system***

***Open the Terminal and go to your selected distribution! And execute the following command.***

# wsl-vpnkit setup as a distro

wsl.exe -d wsl-vpnkit --cd /app cat /app/wsl-vpnkit.service | sudo tee /etc/systemd/system/wsl-vpnkit.service

# copy and edit for wsl-vpnkit setup as a standalone script

sudo cp ./wsl-vpnkit.service /etc/systemd/system/

sudo nano /etc/systemd/system/wsl-vpnkit.service

# enable the service

sudo systemctl enable wsl-vpnkit

# start and check the status of the service

sudo systemctl start wsl-vpnkit

systemctl status wsl-vpnkit

after that restart your system. And start the Ubuntu distribution and Check the wsl-vpnkit status.

\*\* if you don’t want to use shell execution. Please run our .sh file, it will do automatically

./wsl-vpnkit\_startup\_setup.sh

## Nvidia-Driver Installation:

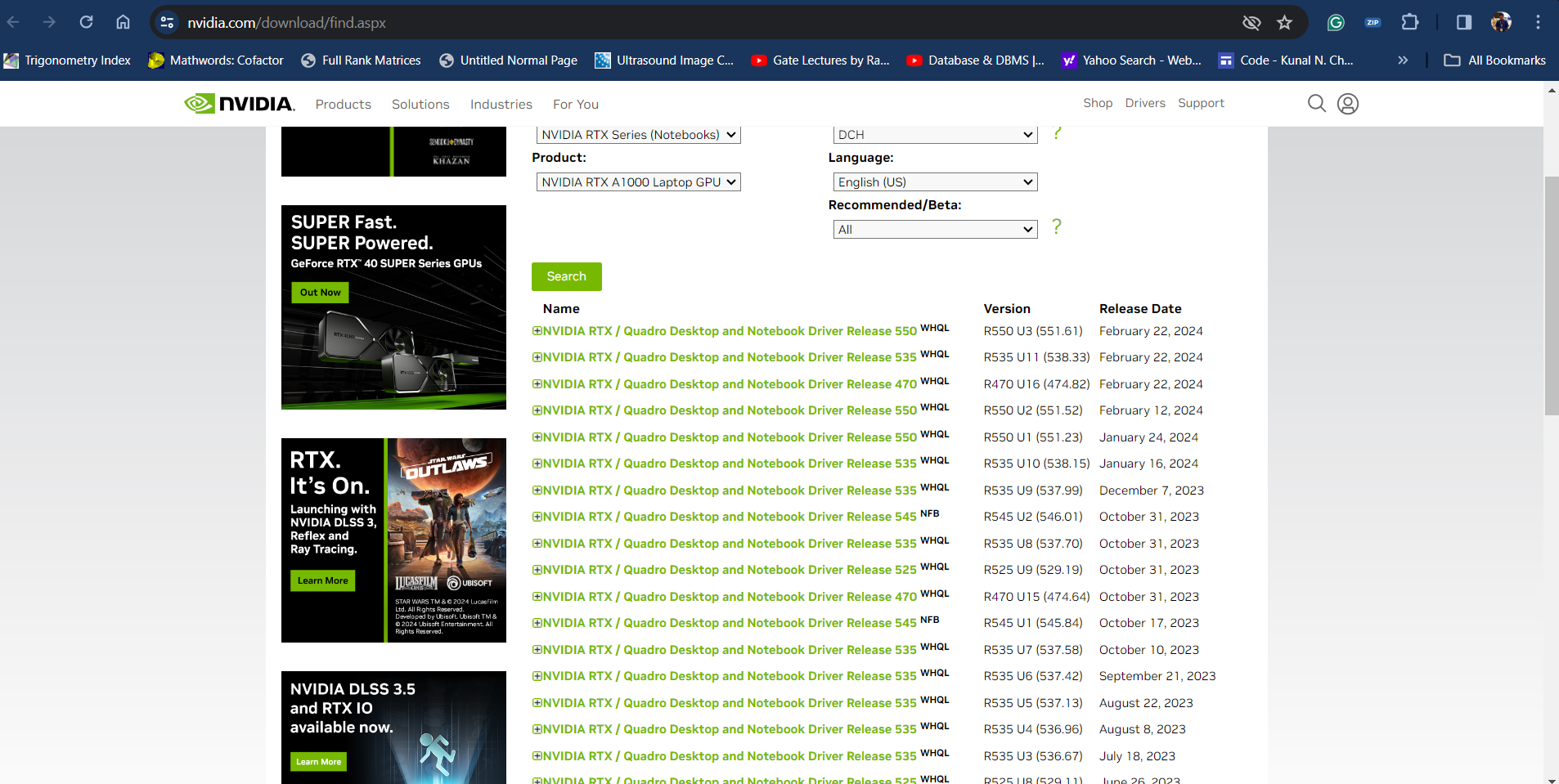
Link: <https://www.nvidia.com/download/find.aspx>

Click on Link and select the appropriate option as shown below:

A screenshot of a computer

Description automatically generated

Click on search, it will give you list of available versions of driver.

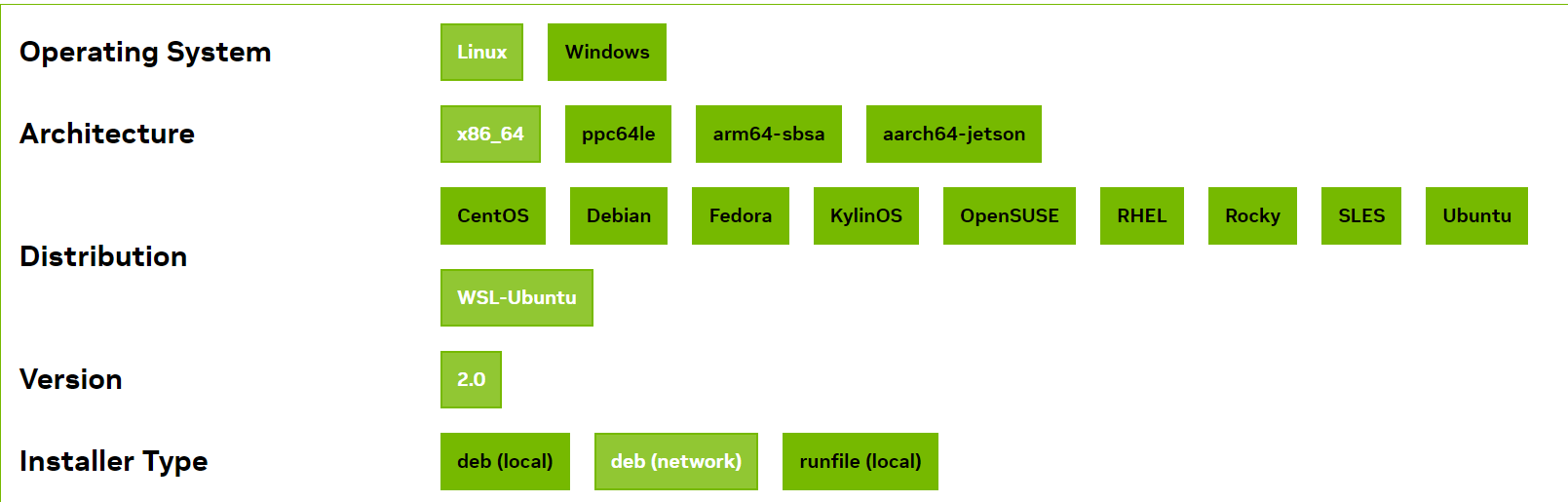


Download the driver and install it in your system. In our case we have selected **551.52** versions

## [Cuda Toolkit Installation:](https://developer.nvidia.com/cuda-downloads?target_os=Linux&target_arch=x86_64&Distribution=WSL-Ubuntu&target_version=2.0&target_type=deb_network)

Link: <https://developer.nvidia.com/cuda-downloads?target_os=Linux&target_arch=x86_64&Distribution=WSL-Ubuntu&target_version=2.0&target_type=deb_network>

Select the appropriate options:



It will give you to download and install appropriate driver. As mentioned in the screen shot.

A screenshot of a computer

Description automatically generated

Follow the command to download and install cuda toolkit.

### Base Installer:

Installation Instructions:

* wget https://developer.download.nvidia.com/compute/cuda/repos/wsl-ubuntu/x86\_64/cuda-keyring\_1.1-1\_all.deb
* sudo dpkg -i cuda-keyring\_1.1-1\_all.deb
* sudo apt-get update
* sudo apt-get -y install cuda-toolkit-12-4

Additional installation options are detailed [**here**](https://docs.nvidia.com/cuda/cuda-installation-guide-linux/#meta-packages)**.**

## Docker Installation in WSL

Link1: [https://docs.rapids.ai/install?\_gl=1\*s0kbz1\*\_ga\*ODkyMzg4MDA5LjE3MTA1OTAxMjY.\*\_ga\_RKXFW6CM42\*MTcxMDY1MDc2Mi4zLjAuMTcxMDY1MDc2Mi42MC4wLjA.#wsl2-docker](https://docs.rapids.ai/install?_gl=1*s0kbz1*_ga*ODkyMzg4MDA5LjE3MTA1OTAxMjY.*_ga_RKXFW6CM42*MTcxMDY1MDc2Mi4zLjAuMTcxMDY1MDc2Mi42MC4wLjA.#wsl2-docker)

Link 2: <https://learn.microsoft.com/en-us/windows/wsl/tutorials/gpu-compute>

Download and Install. Copy command below to download and install the latest:

curl https://get.docker.com | sh

Install Latest NVIDIA Docker. Select the [appropriate supported distribution](https://nvidia.github.io/nvidia-container-runtime/):

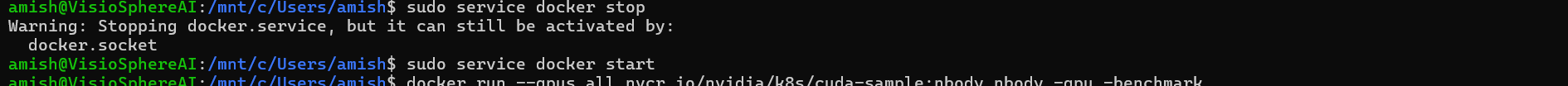
* distribution=$(. /etc/os-release;echo $ID$VERSION\_ID)
* curl -s -L https://nvidia.github.io/nvidia-docker/gpgkey | sudo gpg --dearmor -o /usr/share/keyrings/nvidia-docker-keyring.gpg
* curl -s -L https://nvidia.github.io/nvidia-docker/$distribution/nvidia-docker.list | sed 's#deb https://#deb [signed-by=/usr/share/keyrings/nvidia-docker-keyring.gpg] https://#g' | sudo tee /etc/apt/sources.list.d/nvidia-docker.list
* sudo apt-get update
* sudo apt-get install nvidia-container-runtime

A screenshot of a computer screen

Description automatically generated

Start Docker. In new terminal window run:

* sudo service docker stop.
* sudo service docker start.



Test NVIDIA Docker. In a terminal window run:

docker run --gpus all nvcr.io/nvidia/k8s/cuda-sample:nbody nbody -gpu -benchmark

* It will Check the docker image available in your local, if it is available, it will run it.
* If specific docker image is not available, it will pull it.

A screenshot of a computer program

Description automatically generated