

# WSL安装CUDA环境

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## 1. 打开虚拟机功能

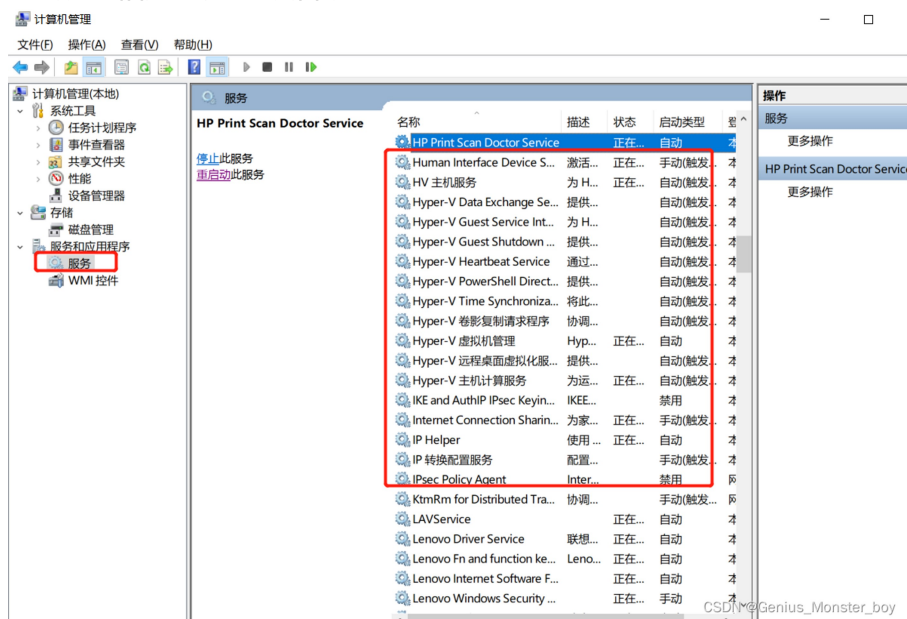
打开控制面板—>程序与功能—>启用或关闭Windows功能，勾选以下功能

适用于Linux的Windows子系统

虚拟机平台

计算机管理-服务

Hyper-v所有相关服务自动启动



重启

## 2. 安装cuda-wsl驱动，注意英伟达官网如果找不到把com改为cn即可

驱动下载地址：<https://developer.nvidia.com/cuda/wsl>

根据你自己显卡型号选择对应驱动

### NVIDIA Driver Downloads

Select from the dropdown list below to identify the appropriate driver for your NVIDIA product.

Product Type: GeForce  
Product Series: GeForce RTX 30 Series (Notebooks)  
Product: GeForce RTX 3050 Laptop GPU  
Operating System: Windows 11  
Download Type: Game Ready Driver (GRD)  
Language: English (US)

SEARCH

下载并安装

## 3. 安装WSL2

cmd查看WSL版本

wsl -l -v

如果是WSL1，需要升级到WSL2

下载Linux 内核更新包并安装，下载地址

[https://wslstorestorage.blob.core.windows.net/wslblob/wsl\\_update\\_x64.msi](https://wslstorestorage.blob.core.windows.net/wslblob/wsl_update_x64.msi)

将Ubuntu18.04 设置为WSL2

```
wsl --set-version Ubuntu-18.04 2
```

查看wsl版本，看是否变成版本2

```
wsl -l -v
```

#### 4.安装CUDA

```
sudo apt-key adv --fetch-keys
```

```
http://developer.download.nvidia.com/compute/cuda/repos/ubuntu1804/x86\_64/7fa2af80.pub
```

```
sudo sh -c 'echo "deb http://developer.download.nvidia.com/compute/cuda/repos/ubuntu1804/x86\_64/" > /etc/apt/sources.list.d/cuda.list'
```

```
sudo apt-get update
```

```
sudo apt-get install -y cuda-toolkit-11-0
```

如果缺少依赖报错就安装下面依赖

```
sudo apt-get install freeglut3-dev build-essential libx11-dev libxmu-dev libxi-dev libgl1-mesa-glx  
libglu1-mesa libglu1-mesa-dev
```

补充：WSL更换源，加速软件下载

```
sudo cp /etc/apt/sources.list /etc/apt/sources.list.bak
```

```
sudo chmod 777 /etc/apt/sources.list
```

```
sudo vim /etc/apt/sources.list
```

在vim命令模式下按d，删除里面内容

按i切换到编辑模式 将下面内容粘贴进去

按esc按键回到命令模式 按:wq保存文件

阿里源：

```
deb http://mirrors.aliyun.com/ubuntu/ bionic main restricted universe multiverse
```

```
deb-src http://mirrors.aliyun.com/ubuntu/ bionic main restricted universe multiverse
```

```
deb http://mirrors.aliyun.com/ubuntu/ bionic-security main restricted universe multiverse
```

```
deb-src http://mirrors.aliyun.com/ubuntu/ bionic-security main restricted universe multiverse
```

```
deb http://mirrors.aliyun.com/ubuntu/ bionic-updates main restricted universe multiverse
```

```
deb-src http://mirrors.aliyun.com/ubuntu/ bionic-updates main restricted universe multiverse
```

```
deb http://mirrors.aliyun.com/ubuntu/ bionic-proposed main restricted universe multiverse
```

```
deb-src http://mirrors.aliyun.com/ubuntu/ bionic-proposed main restricted universe multiverse
```

```
deb http://mirrors.aliyun.com/ubuntu/ bionic-backports main restricted universe multiverse
```

```
deb-src http://mirrors.aliyun.com/ubuntu/ bionic-backports main restricted universe multiverse
```

更新一下包

```
sudo apt update
```