

# nvidia-docker setting

## cuda 설치 (graphic card가 없으면 생략 가능)

```
$ release="ubuntu"$(lsb_release -sr | sed -e "s/\././g")
$ sudo apt install sudo gnupg
$ sudo apt-key adv --fetch-keys "http://developer.download.nvidia.com/compute/cuda/repos/"$release"/x86_64/7fa2af80.pub"
$ sudo sh -c 'echo "deb http://developer.download.nvidia.com/compute/cuda/repos/"$release"/x86_64 /" > /etc/apt/sources.list.d/nvidia-cuda.list'
$ sudo sh -c 'echo "deb http://developer.download.nvidia.com/compute/machine-learning/repos/"$release"/x86_64 /" > /etc/apt/sources.list.d/nvidia-ml.list'
$ sudo apt update
$ apt-cache search nvidia
```

```
$ sudo apt install -y nvidia-384
$ sudo apt install -y dkms nvidia-modprobe
$ sudo reboot
```

## cuda 설치 확인

```
$ sudo cat /proc/driver/nvidia/version | nvidia-smi
```

## nvidia docker 설치

```
$ curl -s -L https://nvidia.github.io/nvidia-docker/gpgkey | sudo apt-key add -
$ distribution=$(. /etc/os-release;echo $ID$VERSION_ID)
$ curl -s -L https://nvidia.github.io/nvidia-docker/$distribution/nvidia-docker.list | sudo tee /etc/apt/sources.list.d/nvidia-docker.list
$ sudo apt update
$ sudo apt install -y nvidia-docker2
```

## docker daemon 설정

```
$ sudo nano /etc/docker/daemon.json
```

```
{
  "exec-opts": ["native.cgroupdriver=systemd"],
  "log-driver": "json-file",
  "log-opts": {
    "max-size": "100m"
  },
  "data-root": "/mnt/storage/docker_data",
  "storage-driver": "overlay2",
  "default-runtime": "nvidia",
  "runtimes": {
    "nvidia": {
      "path": "/usr/bin/nvidia-container-runtime",
      "runtimeArgs": []
    }
  }
}
```

```
$ sudo systemctl restart docker
$ sudo docker run --runtime=nvidia --rm nvidia/cuda nvidia-smi
```

