Build Environment: Tensorflow-GPU in Docker

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# Difference in docker installation

**without docker, we must install:**

* Anaconda
* pip install tensorflow-gpu
* CUDA
* cudnn
* Nvidia Driver

**with docker, we just need to install:**

* Nvidia Driver
* **docker**
* Nvidia docker
* Tensorflow-GPU image

# Installation docker

* Disable ubuntu nouveau driver by
* sudo ubuntu-drivers autoinstall
* Install docker of corresponding version
* sudo apt-get install docker-ce=18.09.0~ce~3-0~ubuntu
* Install Nvidia docker
* sudo apt-get install -y nvidia-docker2
* Get Tensorflow-GPU image
* sudo docker pull tensorflow/tensorflow:devel-gpu

# Appendix

# Set Static IP for WiFi connected PC

network:  
 version: 2  
 renderer: NetworkManager  
 ethernets:  
 #network card identification  
 wlx002127b8ee7a:  
 dhcp4: no  
 #IP/net mask by "ip a"  
 addresses: [192.168.50.169/24]  
 #gateway by "route -n"  
 gateway4: 192.168.50.1  
 nameservers:  
 #use gateway as nameserver proxy by "nmcli dev show | grep DNS"  
 addresses: [192.168.50.1]

# Docker Tips

docker pull  
docker commit   
docker run -it  
docker start  
docker attach  
docker rm  
docker ps -a  
docker cp