

F.CS308 Лаборатори № 1

Лабораторийн орчин бэлтгэх:

Windows

1. Check Settings -> About -> Windows specifications: **Version 1902** minimum requirement
2. Start -> Windows PowerShell run as administrator click
3. Type **wsl --install**
4. After Installation Restart PC
5. Press Windows button or click Start icon, type "**Microsoft Store**", in search field type Ubuntu and install
6. After installation click Ubuntu icon
7. Set Username and Password
8. `sudo apt-get update && apt-get upgrade`
 - a. if error occurs
 - i. `sudo apt install ntp`
 - ii. `sudo service ntp restart`
9. type "**code .**" on ubuntu terminal and install remote wsl extension on vscode
<https://code.visualstudio.com/docs/remote/wsl-tutorial>

windows + cuda

1. install graphic driver
2. follow instruction <https://docs.nvidia.com/cuda/cuda-installation-guide-microsoft-windows/index.html>
3. install anaconda <https://www.anaconda.com/>
4. create new environment

windows + docker

1. follow instructions <https://docs.docker.com/desktop/install/windows-install/>
2. install Vscode

Ubuntu + docker + GPU

1. install graphic driver and restart
2. install docker on ubuntu <https://docs.docker.com/engine/install/ubuntu/>
3. install nvidia-docker <https://docs.nvidia.com/datacenter/cloud-native/container-toolkit/install-guide.html#docker>
4. `docker run --gpus all -it nvcr.io/nvidia/pytorch:22.08-py3`
5. install vscode

Шаардлагатай сангууд суулгах:

`sudo apt-get update && apt-get upgrade`

```
sudo apt-get install ffmpeg
```

```
Opencv      pip3 install opencv-python
```

```
Numpy       pip3 install numpy matplotlib scipy pandas scikit-learn
```

```
PyTorch     pip3 install torch torchvision torchaudio --extra-index-url  
https://download.pytorch.org/whl/cpu
```