

Instructions DTU Cluster

General Instructions: <https://gist.github.com/RasmusJuul/86d8d664f25315e05d9bf95fe4412de5>

Tensorflow Setup: https://www.hpc.dtu.dk/?page_id=3755c

1. Download VPN: <https://net.ait.dtu.dk/vpn/>
2. Login in VPN with
 - a. Connect to the server: `vpn.dtu.dk`
 - b. Insert LoginCredentials: (student email, DTU password)
3. (Download ThinLink client: <https://www.cendio.com/thinlinc/download=> or
4. Access Cluster with Terminal:
 - a. `ssh sXXXXXX@login1.hpc.dtu.dk`
 - b. run `linuxsh` or `voltash` for interactive node with gpu (You should NEVER run anything on the login node, so always do this step)
5. Download WinScp for File exchange: <https://gbar.dtu.dk/index.php/faq/25-winscp>

Hostname: `transfer.gbar.dtu.dk`

User name: `sXXXXXX`

Password: `DTU_PASSWORD`

6. Create virtual environment

```
• run module load python3 (or whatever version of python you want e.g. python3/3.9.10)
• run python3 -m venv env (change "env" to whatever you want the environment to be called)
• run source env/bin/activate
• run pip install -r requirements.txt
  ◦ if you have problems with getting torch to run on GPU try installing it like this pip install torch torchvision -f https://download.pytorch.org/whl/cu117/torch_stable.html
• Add loading of the module to the activate file, so it is automatically done whenever you source the env.
  ◦ run cd env/bin
  ◦ run nano activate
  ◦ Add "module load python3" to the top of the document and press ctrl-x then y to save the changes.
```

7. Create bash-file
 - a. Available GPUs: https://www.hpc.dtu.dk/?page_id=2759
8. Submit Job to Cluster by running bash-file with: `bsub < submit.sh`
9. Check status of job with `bstat`