

Template repo -

<https://gitlab.cs.uni-saarland.de/mara00002/torch-condor-template>

- Fork the template repo and clone it.
(Check steps in **readme** for ssh config)

VPN - <https://www.hiz-saarland.de/dienste/vpn/einrichtung-vpn-client-windows>

- vpn.hiz-saarland.de (creds same as hiz e.g.abdc000)

Setup ssh key to access **sci_cluster** and **git**

How to Access Cluster -

- Cluster Login -
Username - neuronet_team050@conduit.cs.uni-saarland.de
Password - vBdeIJm22jYHuV
- ssh neuronet_team050@conduit.cs.uni-saarland.de
- Copy code from local to cluster -
 - scp -r code
neuronet_team050@conduit.cs.uni-saarland.de:/home/neuronet_team050/torch-condor-template/

Conda Commands-

<https://kingsx.cs.uni-saarland.de/index.php/s/ssmj33dxmgGsAYd>

Submitting Scripts to the Cluster

Point run.sh to your script

```
run.sh 116 B Edit v
1 nvidia-smi
2 echo $CUDA_VISIBLE_DEVICES
3 echo $HOSTNAME
4 which python
5 python -m pip list
6
7 python torch_matmul_docker.py
```

Adjust run.sub for log file names



```
1 universe = docker
2 docker_image = pytorch/pytorch:2.0.1-cuda11.7-cudnn8-runtime
3 # This uses the conda env
4 executable = conda_run.sh
5 environment = PROJECT_ROOT=${ENV(PWD)}
6 initiaIdir = ${ENV(PWD)}
7 output = logs/torch_matmul.${ClusterId}.${ProcId}.out
8 error = logs/torch_matmul.${ClusterId}.${ProcId}.err
9 log = logs/torch_matmul.${ClusterId}.log
10 should_transfer_files = yes
11 when_to_transfer_output = ON_EXIT
12 request_GPUs = 1
13 request_CPUs = 1
14 request_memory = 1G
15 requirements = UidDomain == "cs.uni-saarland.de"
16 getenv = HOME
17 +Bant@P@HomeMounted = true
18 queue 1
19
```

This process triggers `conda_run.sh`, which in turn selects the Conda environment as specified in the `environment.yml` file, and subsequently executes the script defined in `run.sh`. To modify the Python script being executed, simply edit the last line in the `run.sh` file.

Commands -

1. `condor_submit run.sub`
2. `condor_q (-analyze / -better)`

- Check log files - “exit code 0”
- Err files - there shouldn’t be any errors
- Output files - to check the stdout statements
- Copy folder(torch-condor-template) to local machine -
 - `scp -r neuronet_team050@conduit.cs.uni-saarland.de:/home/neuronet_team050/torch-condor-template .`
- Create a zip with all the files in it (torch-condor-template)

FAQ -

<https://wiki.cs.uni-saarland.de/en/HPC/faq>

Note -

It is currently very tricky to run notebooks on the cluster, so please use **python scripts** instead. , your **zip** file must include all the necessary files to run your code on the cluster

