How to set up environment in SCITAS cluster

This page explain how to easily set up a Pytorch environment for you to work on your project.

Step-by-step guide

1. First login to the scitas cluster using your GASPAR username and password:

   ssh -y <username>@deneb2.epfl.ch

2. Issue these commands in the following order:

   (a) module load gcc python
   (b) pip3 install virtualenv
   (c) virtualenv ~/venv/pytorch
   (d) source ~/venv/pytorch/bin/activate
   (e) pip3 install numpy scipy pandas sympy nose future matplotlib
   (f) pip3 install https://download.pytorch.org/whl/cu80/torch-1.0.1.post2-cp36-cp36m-linux_x86_64.whl
   (g) pip3 install torchvision

3. To exit the environment, just issue the command: ***deactivate***

This concludes setting up your environment where all your libraries are installed.

Send batch jobs

To send a job to the batch system, create a file for example: ***myjob.sh*** and copy paste the code below while adding your username and changing the python file name. After creating the file, issue the command: ***sbatch myjob.sh*** to submit your job.

```
#!/bin/bash -l
#SBATCH --workdir /home/<put-your-username-here>
#SBATCH --nodes 1
#SBATCH --ntasks 1
#SBATCH --cpus-per-task 1
#SBATCH --mem 8G
#SBATCH --partition gpu
#SBATCH --gres gpu:1
#SBATCH --qos gpu_free
#SBATCH --account civil-459
#SBATCH --reservation civil-459-lab
#SBATCH --time 12:00:00

module load gcc python cuda

source ~/venv/pytorch/bin/activate

python3 run.py # Here you run the Python file you want
```

Note: When using the clusters outside this time range (Wednesday 8:00AM and 12:00PM), change the reservation to **civil-459-project**

Note2: If you need to install any new library to python using ***pip3***, make sure that you are working inside the environment by first issuing the command ***source ~/venv/pytorch/bin/activate*** and then install the library.