**Server instructions**

**Remember that there are other people using the server as well, so use the resources responsibly**

—Always free memory when finished processing (e.g. simply restart/shutdown jupyter kernel)

—Use less memory demanding data types when possible (e.g. numpy float datatype is float64 by default, specify float32 when creating massive arrays: a = np.array([0, 1,..]).astype(np.float32))

—Do not fight with the colleagues for the server, make a timetable

**Access via ssh:**

:~$ ssh -p 13522 *username*@mic.udg.edu

**Copy files from local to the server:**

:~$ scp -P 13522 -r /path/in/local *username*@mic.udg.edu:/home/*username*/path/in/remote

Use -r when copying a directory

Gpu usage

Nvidia-smi

Users

W

Unzip

tar -xzvf

**Use virtualenv for managing python environments and packages.**

**Create a virtual python environment**

:~/path/$ cd

:~$ virtualenv *myVirtEnv*

**Activate the environment**

:~$ source ~/*myVirtEnv*/bin/activate

**To deactivate**

:~$ deactivate

**Check**

:~$ which python

**Output should be**

:~$ /home/*username*/*myVirtEnv*/bin/python

**Install packages using pip**

:~$ pip install numpy

**Also, you can transfer an existing environment**

*username*@local:~$ pip freeze > requirements.txt

*username*@local:~$ scp -P 13522 requirements.txt *username*@mic.udg.edu:/home/*username*/

(*myVirtEnv*) username@mic.udg.edu:~$ pip install -r requirements.txt

**Run jupyter-notebook from the server and access from local**

*username*@mic.udg.edu:~$ jupyter notebook --no-browser --port 8889

*username*@local:~$ ssh -N -f -L localhost:8888:localhost:8889 *username*@mic.udg.edu -p 13522

84.88.154.143

**Open a browser and go to**

84.88.154.143:8888

**tmux**

‘*tmux is a terminal multiplexer for Unix-like operating systems. It allows multiple terminal sessions to be accessed simultaneously in a single window. It is useful for running more than one command-line program at the same time.*’ - Wikipedia.

You can run tmux session on the server and connect to it any time you want without terminating the running processes.

**Create a tmux session on server**

*username*@mic.udg.edu:~$ tmux

**Connect from a local machine**

*username*@local:~$ ssh -p 13522 *username*@mic.udg.edu -t tmux attach-session

**Disconnect from the session (by default <Prefix> is Ctrl+b)**

*username*@mic.udg.edu:~$ <Prefix>+d

**sshfs**

Using this tool you can mount your server home directory to a folder in your local machine.