

How to use a GPU machine and iPython Notebook with SSH

Goal: running ipython notebook remotely on the following GPU machine :
pc-sc-394.priv.enst-bretagne.fr

Open a terminal :

- Connect to the GPU machine using ssh:
`ssh pc-sc-394.priv.enst-bretagne.fr`
- Activate Deep Learning environment:
`source /opt/campux/virtualenv/deeplearning/bin/activate`
- Run Python Notebook :
`ipython notebook --no-browser --port=8888`

Open **another** terminal and create a SSH tunnel:

```
ssh -N -L localhost:1234:localhost:8888 pc-sc-394.priv.enst-bretagne.fr
```

Open a browser using the following url address:

```
http://localhost:1234
```

Todo at the end of the session:

- Kill the SSH tunnel (using CTRL+C for instance)
- Stop the python notebook

List of GPU machines :

pc-sc-XXX.priv.enst-bretagne.fr where XXX in 392-399, 492-499
srv-df-89X.priv.enst-bretagne.fr with X in 2-6

If you need to install an extra python package (for instance keras-vis) :

```
pip3 install --user keras-vis  
source /opt/campux/virtualenv/deeplearning/bin/activate  
PYTHONPATH=$HOME/.local/lib/python3.6/site-packages jupyter notebook
```