Instructions tensorflow et al. on studat (Linux) computers forskarhuset floor 7.

Log in using your CID

start a terminal window

Check that you have bash as default shell: \$0

Otherwise change to bash: bash

make a directory for your course material: mkdir NAME and : cd NAME to set up virtual environment following instructions below:

point out lib-files for Cuda Toolkit (do each time):

export LD_LIBRARY_PATH=/chalmers/sw/sup64/cuda_toolkit-9.0.176.4/lib64 If you get error on this, try:

bash -c "export LD_LIBRARY_PATH=/chalmers/sw/sup64/cuda_toolkit-9.0.176.4/ lib64"

create new virtual environment 'tensor_flow' (first time):

python3.6 -m venv tensor_flow

activate virtual environment (every time):

source tensor flow/bin/activate

install pip3 in virtual environment (first time):

python -m ensurepip

install tensorflow.gpu in virtual environment (first time):

pip3 install tensorflow.gpu

install jupyter nortebook:

python -m pip install jupyter

keras:

python -m pip install keras

matplotlib:

python -m pip install -U matplotlib

run notebook (should open automatically in firefox)

jupyter notebook &

(nvidia-smi (visa GPU processer))

To deactivate virtual environment efter session:

deactivate

While running GPU the system might complain that the GPU memory is used up, this is a feature of Tensorflow that allocates the full GPU memory, so this can be ignored.