#!/bin/bash

# Update packages

apt-get update

# Non-interactive mode, use default answers

export DEBIAN\_FRONTEND=noninteractive

# Workaround for libc6 bug - asking about service restart in non-interactive mode

# https://bugs.launchpad.net/ubuntu/+source/eglibc/+bug/935681

echo 'libc6 libraries/restart-without-asking boolean true' | debconf-set-selections

# Install Python 3.7

sudo add-apt-repository -y ppa:deadsnakes/ppa

sudo apt-get -y install python3.7 python3.7-dev

curl https://bootstrap.pypa.io/get-pip.py | sudo python3.7

# Add Nvidia repositories

wget https://developer.download.nvidia.com/compute/cuda/repos/ubuntu1804/x86\_64/cuda-repo-ubuntu1804\_10.0.130-1\_amd64.deb

dpkg -i cuda-repo-ubuntu1804\_10.0.130-1\_amd64.deb

apt-key adv --fetch-keys https://developer.download.nvidia.com/compute/cuda/repos/ubuntu1804/x86\_64/7fa2af80.pub

apt-get update

wget http://developer.download.nvidia.com/compute/machine-learning/repos/ubuntu1804/x86\_64/nvidia-machine-learning-repo-ubuntu1804\_1.0.0-1\_amd64.deb

dpkg -i nvidia-machine-learning-repo-ubuntu1804\_1.0.0-1\_amd64.deb

apt-get update

# Install drivers, CUDA and cuDNN

apt-get -y install --no-install-recommends nvidia-driver-418

apt-get -y install --no-install-recommends cuda-10-0 libcudnn7=\\*+cuda10.0 libcudnn7-dev=\\*+cuda10.0

apt-get -y install --no-install-recommends libnvinfer5=5.\\*+cuda10.0 libnvinfer-dev=5.\\*+cuda10.0

# Install TensorFlow

pip3.7 install tensorflow-gpu

# Install PyTorch

#pip3.7 install $(curl https://pytorch.org/assets/quick-start-module.js | grep -A1 "stable,pip,linux,cuda10.0,python3.7" | grep -oP 'https.\*?\.whl')

pip3.7 install torch torchvision

# Install other Python packages

pip3.7 install numpy pandas matplotlib tqdm pexpect opencv-python

# Reboot

reboot