# Jetson setup notes

Topi December 22, 2020

1. Nvidia webpages have good setup guide. Needed to download etcher for image burning.
2. For X11 forwarding need to enable in client .ssh/config - ForwardX11 yes.
3. You can check the jetpack version from file: /etc/nv_tegra_release - though the following script ought to take are of correct versions.
4. Using `https://github.com/dusty-nv/jetson-inference/blob/master/docs/aux-docker.md`
   - `git clone -recursive https://github.com/dusty-nv/jetson-inference`
   - `cd jetson-inference`
   - `docker/run.sh`
5. Opted for building from source - cannot get image feed from container...
   - `sudo apt update`
   - `sudo apt-get install git cmake libpython3-dev python3-numpy`
   - `git clone -recursive https://github.com/dusty-nv/jetson-inference`
   - Create jetson-inference/build directory
   - In jetson-inference/build/ run: `cmake ../`
   - Select to install pytorch!
   - Model downloader can be found from: `cd jetson-inference/tools` and (`./download-models.sh`)
   - Then, still in jetson-inference/build, run: `make` and `sudo make install` and `sudo ldconfig`
6. Now you just go to: `cd jetson-inference/build/aarch64/bin/` and run: `./imagenet.py images/orange_0.jpg images/test/output_0.jpg`
7. Turns out no HQ camera support on jetson...
   - `https://developer.ridgerun.com/wiki/index.php?title=Raspberry_Pi_HQ_camera_IMX477_Linux_driver_for_Jetson#Installing_the_Driver_-_Option_A:_Debian_Packages_.28Recommended.29`
   - Seem rather impossible to resolve...
8. Create virtual env: `python3 -m venv venv`
9. `source venv/bin/activate`
10. Running the imagenet on rpi video: `./imagenet.py rtsp://192.168.1.72:8554/unicast file://test.mp4`
11. Install redis server: `sudo apt install redis`
12. It starts when booted...
13. `sudeo service redis status`
14. redis bind on localhost is mayhem! You can config it in /etc/redis/redis.conf - bind localhost (127...) (comment it out - but beaware of the security risk.)
15. Set the protected mode to no - again in the redis config file.