1. create a separate folder named “Docker” in the /home/cnn, transfer Dockerfile into that folder

2. Change port/default image/gpus and other settings in the start\_docker.sh. Transfer start\_docker.sh in the /home/cnn (main folder).

3. open mac terminal. Type: ssh -L 8891:localhost:8891 [cnn@mcveighlab-octomore.ucsd.edu](mailto:cnn@mcveighlab-octomore.ucsd.edu), password:respi18(update to Respi18===)

4. Build my own image:

- cd to Docker folder

- sudo docker login (zhennongchen, shark950320)

- docker build -t zhennongchen/cuda10 . (don’t forget . here)

-(cuda10 is the repository should be created in DockerHub in advance)

-If have this problem: Posthttp://%2Fvar%2Frun%2Fdocker.sock/v1.38/containers/create: dial unix /var/run/docker.sock: connect: permission denied. Use command sudo chmod 666 /var/run/docker.sock

5. cd to main folder /home/cnn, type bash start\_docker.sh -g 2 -n

6. open web browser, type localhost:8891, use token as password

7. In jupyter, open new terminal, type bash, type cd..,

**type sudo apt-get install libglu1**

**no need- type pip uninstall scipy, then pip install scipy==1.1.0 (we need to\_image())**

8. All files saved locally in octomore -> saved in Experiment, All files saved outside (in NAS drive)

-> saved in Data, do not forget the change the data path when using docker -> use pwd to check the correct data path in docker

9. open another terminal if doing parallel experiments

10. simply close web browser and mac terminal. Next time when return back, first repeat step 3 in mac terminal and repeat step 6.

11. if want to terminate one container, in mac terminal, use ctrl+c to exit, then use sudo docker container rm containerID to remove

12. for Docker\_resample\_laura to resample the volume + segmentation, we need to do in the Docker: cd /opt/conda/lib, then rename by mv libtiff.so.5 libtiff.so.5.orig. And then we in the docker cd to /root/Developer/dv-commandline-utils/src/includes, and then find the location of the new dvResampleVolume.h file(which should be saved in /home/cnn), and the type mv /Experiment/dvResampleVolume.h(this is the location of new dvResampleVolume.h). And then cd back to /dv-command-utils/bin and type make dv-resample-volume

Stop container: sudo docker container stop id

Remove container: sudo docker container rm id

Container list: sudo docker container ls -a

Remove image: sudo docker rmi id