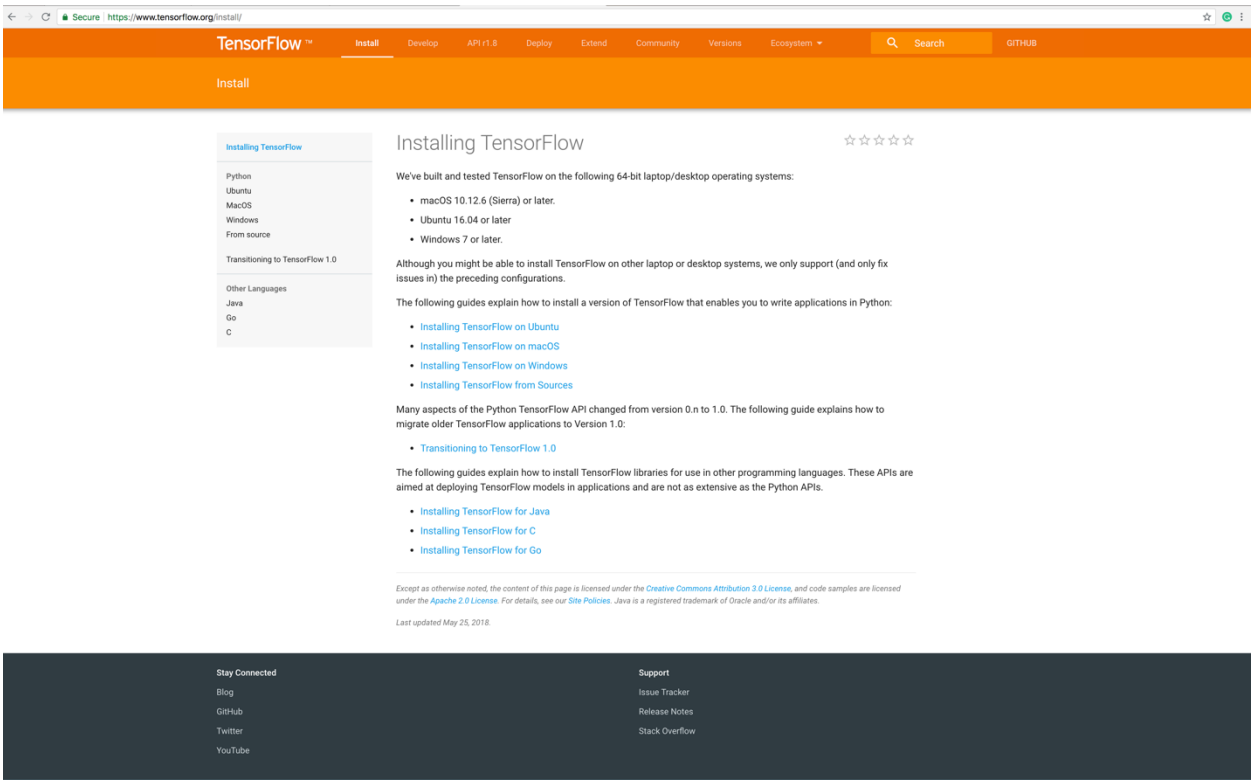
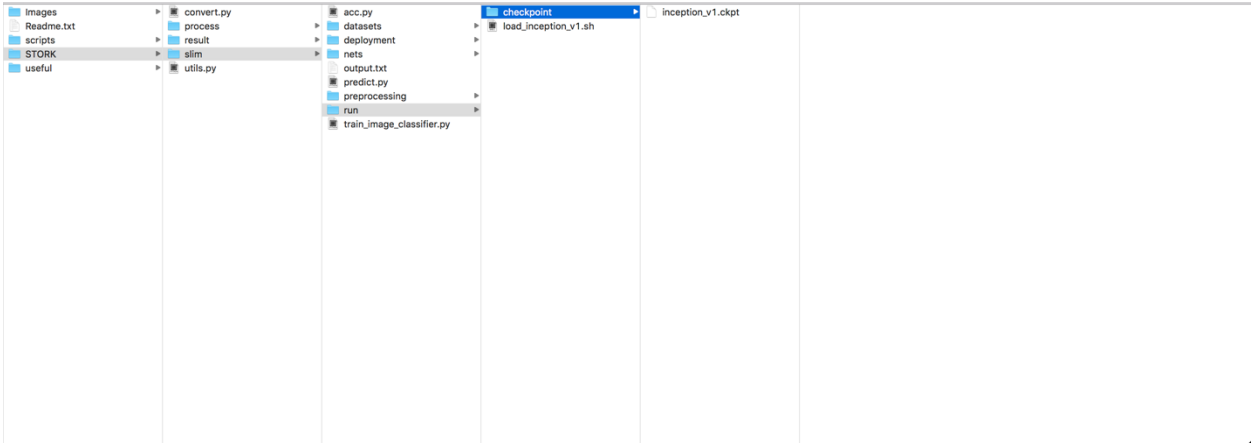
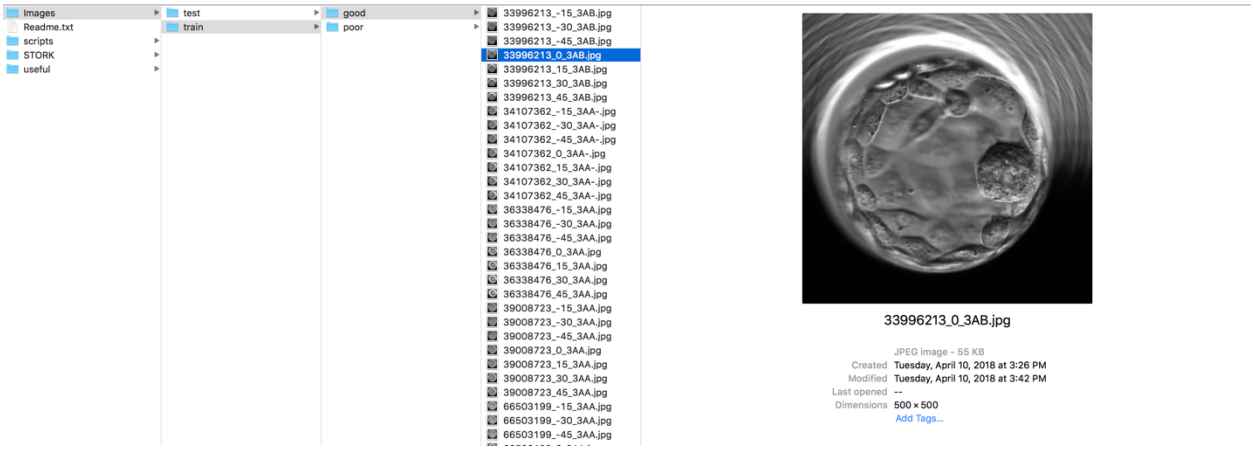
Install the TensorFlow. Follow the instruction from here: https://www.tensorflow.org/install/



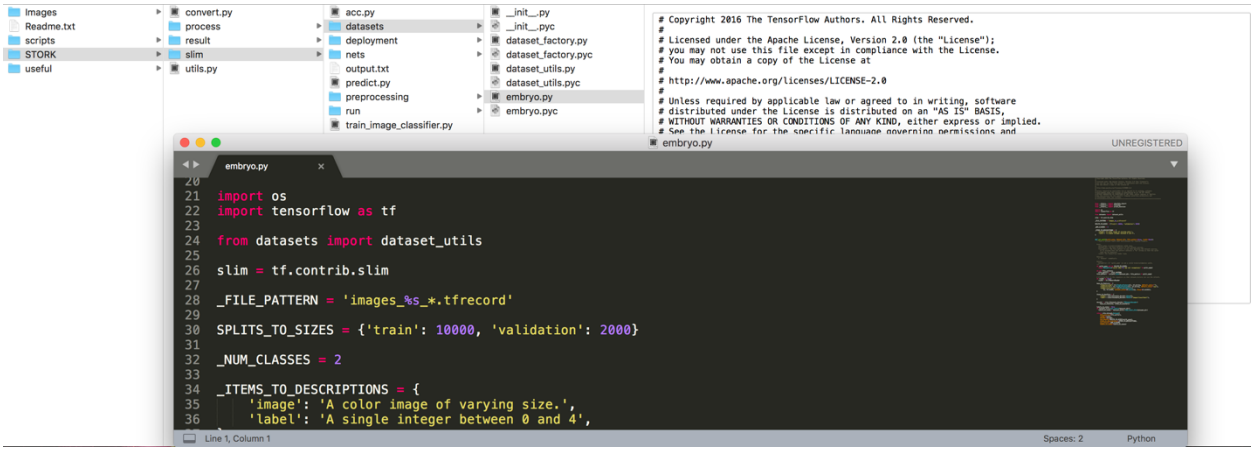
Pre-trained Models of CNN architectures should be downloaded from the "Pre-trained Models" part of https://github.com/wenwei202/terngrad/tree/master/slim#pre-trained-models and be located in your machine (e.g. GitHub_STORK/scripts/slim/run/checkpoint). The files for pre-trained models are available under the column named "Checkpoint".



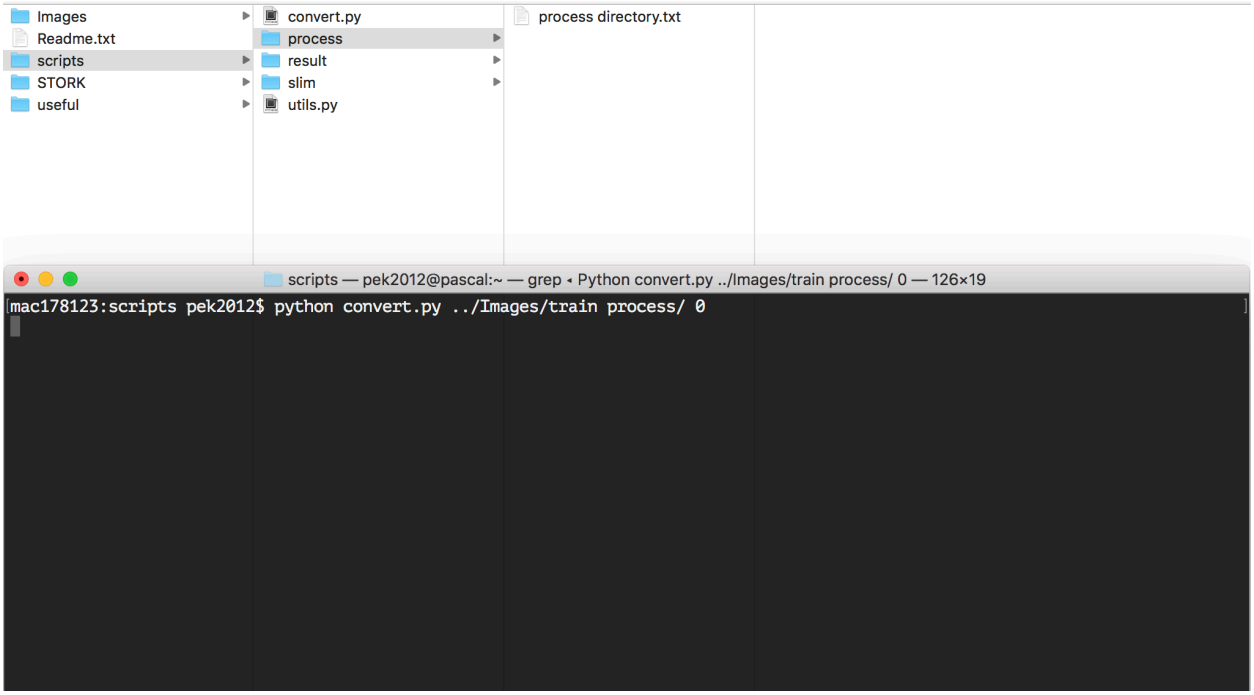
Divide the images with the original size into two or more classes based on the aim of classification (e.g., discrimination of good-quality and poor-quality embryos). 85% of images in each class will be selected as Train set (train and validation) and 15% for Test set.

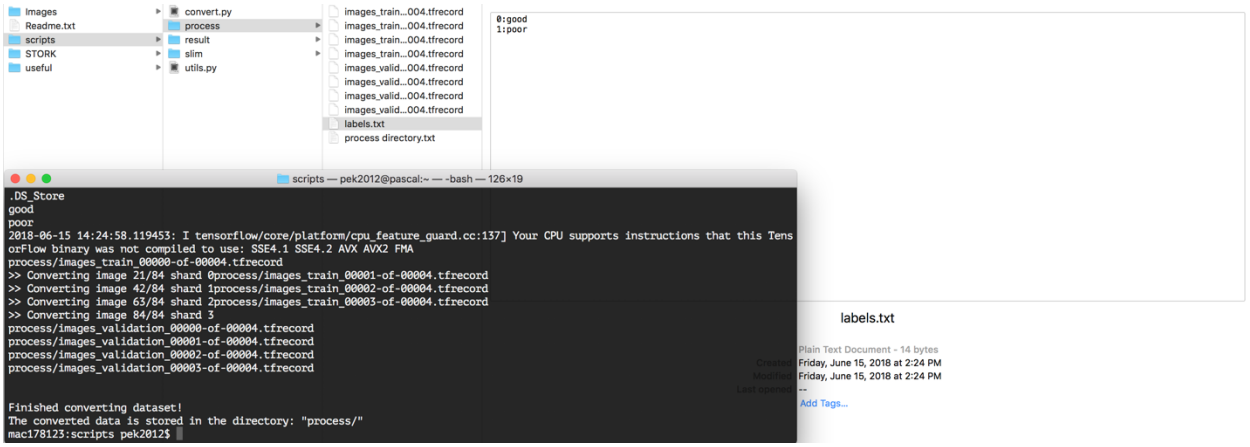


_NUM_CLASSES should be set in embryo.py (this script is located in STORK/scripts/slim/datasets).

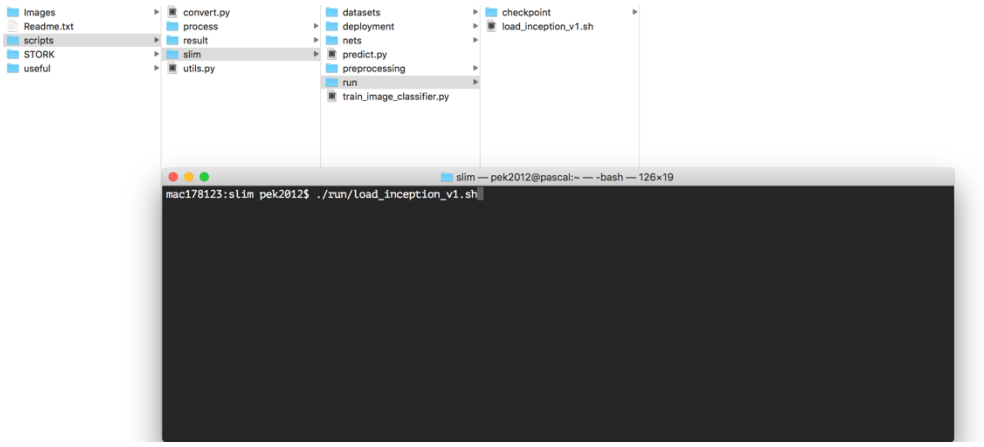


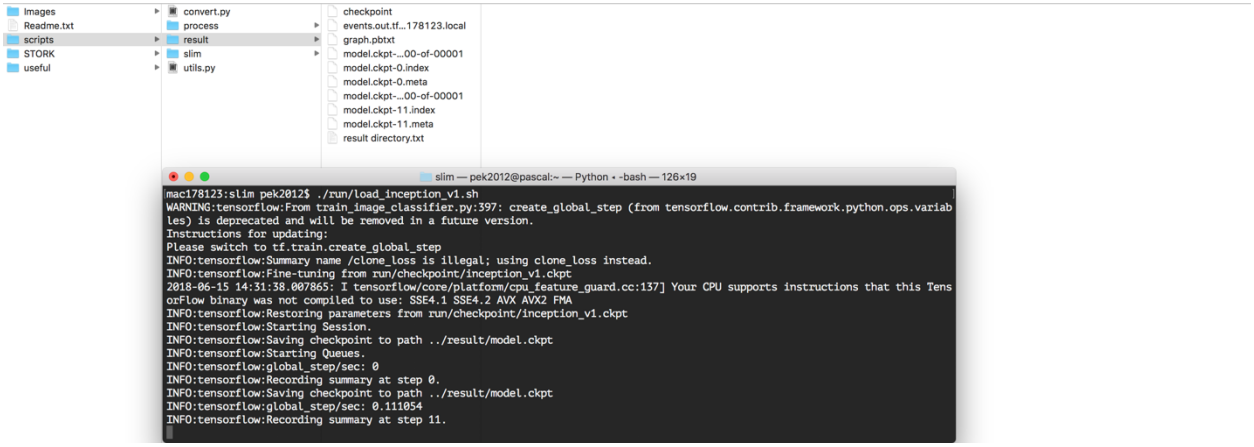
Run the convert.py (it is located in the "STORK/scripts" directory) to allocate the suitable percentage of images to train and validation sets.the convert.py needs three arguments including: the address of images for training, the address of where the result will be located, and the percentage of validation images for the training step (e.g., $ python convert.py ../Images/train process/ 0). It will save converted .tf records in the "process" directory.



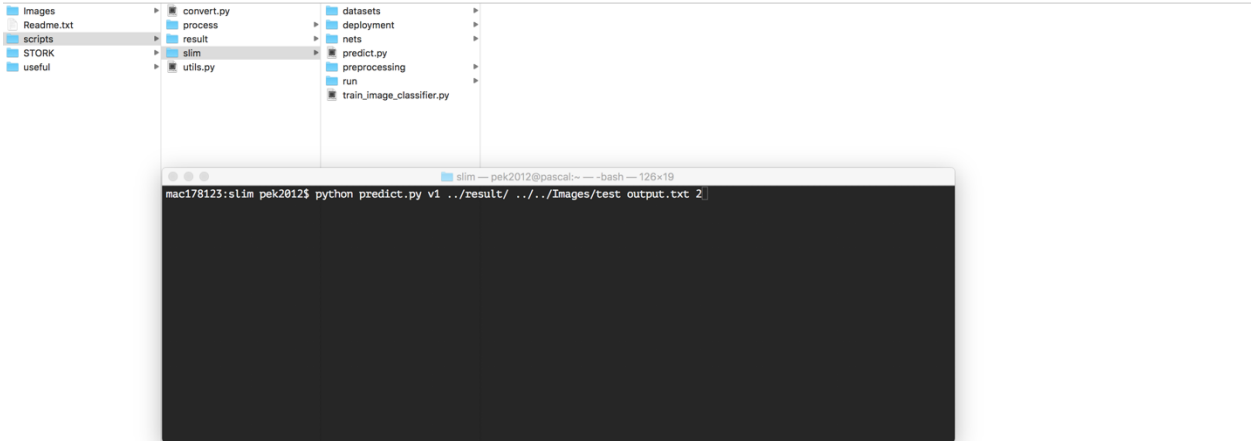


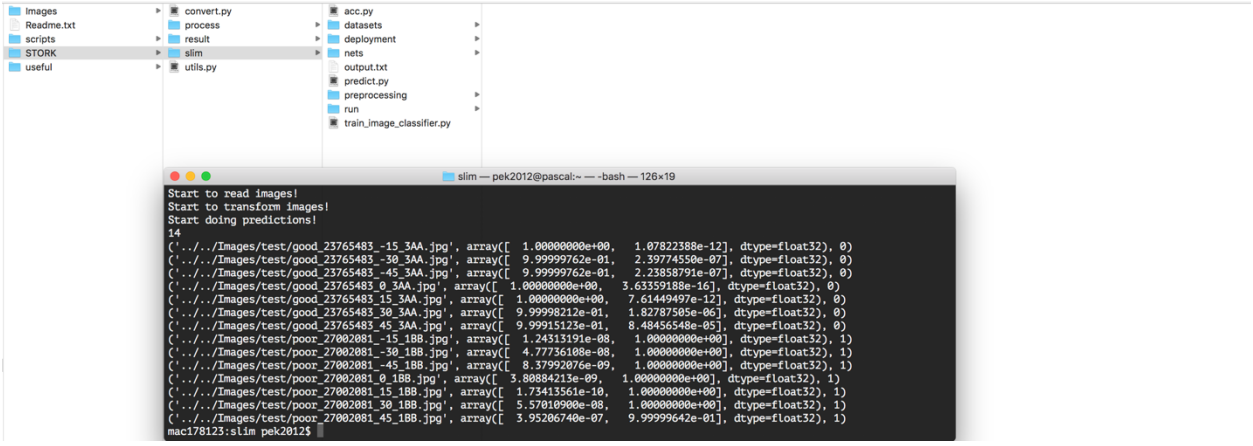
The Inception-V1 architecture should be run on the Train set images from the "STORK/scripts/slim" directory. First got the the following directory: STORK/scripts/slim. Then open load_inception_v1.sh located in "run/" directory and edit PRETRAINED_CHECKPOINT_DIR,TRAIN_DIR, and DATASET_DIR addresses. See the load_inception_v1.sh, for instance. Then, run the following command in shell script:
$ ./run/load_inception_v1.sh





The trained algorithms should be tested using test set images. In folder "STORK/scripts/slim", predict.py loads a trained model on provided images. This code get 5 argu/resultments:
$ python predict.py v1 ../result/ ../../Images/test output.txt 2





The accuracy can be measured using accuracy measurement codes ("acc.py") in "useful" folder. The output.txt file should be in the same folder that you are running acc.py. Then run the following code:
$ python acc.py