

Instructions for running imitation learning code:

**1. Download the prostate dataset from PT1**

- '/raid/candi/lani/MRes\_project/Reinforcement Learning/DATASETS/'
- '/raid/candi/lani/Biopsy\_RL/action\_labels.h5' (pre-obtained labels)
- Patient\_data\_multiple\_lesions.csv (downloaded from git repo)

**2. OBTAINING PAIRED OBSERVATION-ACTION LABELS: writing\_labels.py**

- Change path names :  
PS\_PATH : folder path of prostate dataset  
CSV\_PATH : multiple\_lesions.csv file path (should be included in git repo)  
LABELS\_PATH : file name to save h5py into -> change to what is convenient for you
- Run writing\_labels.py script to obtain h5py file

Note : I also have action\_labels.h5 pre-saved already in PT1 if you want to use that (see point 1) ; otherwise run script writing\_labels.py first before proceeding to training\_script.py

**3. RUNNING TRAINING SCRIPT: train\_script.py**

- Change path names to those on your own device:  
PS\_PATH  
LABELS\_PATH  
CSV\_PATH
- Run cli command : “python train\_script.py --log\_dir SAVE\_FOLDER\_PATH” and include any additional arguments listed below:

Arguments: All set to false, but can be set to true if you want to perform comparison experiments

- Debugging : uses timestep\_debug class which only outputs [1 0 0] as action
- Use\_custom\_policy : uses tanh as final output layer of network instead of relu which is used in stablebaselines networks
- Clip\_actions : clip output actions from network between (-1,1)